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ALMANAC
Atlas and Yearbook
1961

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**INFORMATION
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ALMANAC**
**Atlas and Yearbook
1961**



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Planned and Supervised by
DAN GOLENPAUL ASSOCIATES

McGRAW-HILL • New York City

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DAN GOLENPAUL

Foreword to Fifteenth Edition

The family of almanacs has an old and curious history. About the 13th century they were titled "prognostications," and as a crystal ball medium their edictions were not limited to the stars and weather. They indulged in forecasting political events. This practice (without benefit of pollsters) was banned by French rulers.

Through the centuries the form and purpose of almanacs have undergone considerable changes. Their durability is really an interesting phenomenon, probably just an indication of many people's interest in odd facts and desire for information. This editor was the originator and producer of the *Information Please Quiz Program*. The popularity of this program revealed the tremendous respect all groups in the United States had for knowledge and knowledgeable people.

In 1945 we decided to join the durable group of almanacs. We thought we could strike pay dirt because of the American desire for knowledge.

There are, of course, many and adequate reference books available, but since they are specialized and expensive, we believed there was a need for a book that would do the work of many. We found that the almanac type was best suited for presenting a maximum of information on the widest variety of topics. However, we were not unmindful that most almanacs, like Topsy, just grewed." Our objective, therefore, was to develop a well-ordered almanac edited in terms of modern needs and employing modern journalistic techniques.

The reaction to our first edition in 1947 indicated that we succeeded in producing a modern almanac. With each edition we increased and improved our material to make the book more useful, and now, while retaining all the excellent features of the INFORMATION PLEASE ALMANAC, we have added the attractive qualities of an atlas and yearbook.

By adding atlas and yearbook features in this edition, we are able to give our readers the whole dramatic story of events in 1960 by using words, maps and photos, plus the basic up-to-date material always included in our Almanac. With this expansion of the INFORMATION PLEASE ALMANAC, we may have achieved the almost perfect single volume for many people and many uses.

When we undertook to broaden the scope of our book, we knew we would have problems. And we did. We certainly were not helped by the turbulence of events in 1960. The world wouldn't stay still—25 new nations emerged . . . Khrushchev stormed the United Nations . . . our mad presidential election . . . a new census of our population . . . the Congo went from Lumumba to Kasavubu to Mobutu . . . not to mention that seven-game World Series decided by a home run in the ninth inning.

Nevertheless, we put the book to bed, and now with your permission, we go to bed.

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LIGHT AND SERIOUS TOUCHES

By Marcus Duffield

JANUARY 1960

Rolling off our tongues as the new year opened was a word that was new to most of us innocents—"payola." This was under-the-table wampum to a performer on radio or TV to get your product plugged on a show paid for by somebody else. For example, there was National Parakeet Week, during which parakeets mysteriously popped up all over TV, including "Playhouse 90." . . . Turning to legitimate (?) advertising, there was a new gadget like a television cannon able to shoot messages and pictures on clouds. For instance, a cigarette a mile wide could loom brightly in the sky. . . . Maybe this new year would become known as the Year of Pets. There were more pets in the U.S. than people. Statistic: 26 million dogs, 28 million cats, who would just as soon eat up the 6 million canaries and the 132 million little fishes swimming in our ponds. . . . And maybe 1960 would be a prosperous year, maybe. In 1959 there had been 100 stocks that jumped 50 per cent or more. Latest rage in bathroom equipment was 24-karat gold faucets shaped like swans or flowers. Emerging from the bath, you could put on one of Bergdorf Goodman's new line of ready-to-wear dresses that cost only \$1,000. Cheerful banks were treating their customers to corsages, petunia seeds, candid cameras. In Phoenix, Ariz., a bank entertained its customers at tea, but it was clearly outdone by a bank in New York City that had a dog show in the lounge.

FEBRUARY 1960

This month changed the lives of statesmen. If you want to be a world leader, you can't just sit at your office desk. You must have itchy feet. Prime Minister Khrushchev wandered thousands of miles to Indonesia as a traveling salesman for Communism. Prime Minister Macmillan made an unprecedented tour of Africa in Britain's behalf. President Eisenhower became the first American President to make a four-nation tour of South America. They put the show on the road. . . . Here at home it was a question whether cows would give ink. The Borden Company, second largest dairy, bought up the Commercial Ink and Lacquer Co. . . . Automation came to the bedroom. For those who slept through the alarm clock, there was a new type of bed that would wake the appointed morning minute rose gently until you were wide awake, like or not. . . . Corporations were getting kinder. The American Telephone and Telegraph Co. put out its report in Braille for its 3,000 blind stockholders.

MARCH 1960

Here was a strike. Some of these people rebelling against their capitalistic bosses didn't have one million to rub against another. It was the first actors' strike.

Contest scheduled for this page has been withdrawn.

ake in history against major movie studios. Production of films stopped such strikers as Marilyn Monroe, Gina Lollobrigida and Bing Crosby walk out. (No cause for alarm; it was to be happily settled next month with big pension funds.) . . . Speaking of actors, Jack Paar violated stage tradition by walking out in the middle of a show, and popped off to Hong Kong. He was mad because somebody censored an old, feeble joke that he told. In Hong Kong he thought better of it and came back to the show. . . . There was a TV ex-wonder who kind of flunked. Teddy Nagler had won \$264,000 on the doomed \$64,000 Challenge Question. He knew so much. He took a government test to be a census-taker at \$13 a day, and was rejected. . . . Now we come to a climax in current Americana—the Beatniks. They became such a symbol of revolt against our civilization that they accidentally made money writing about it. In fact, a New York newspaper carried an advertisement. It offered to rent “genuine beatniks, badly groomed,” for parties. If you went to sleep while they read poetry, it was on your own time.

APRIL 1960

Our curious government embarked upon the biggest nose-count in history with an estimated 180 million noses. Some 160,000 census takers conducted a gigantic scientific snoop, even asking some of us whether we had a food freezer or a clothes dryer. One unlucky census taker at a Detroit hotel found that nobody answered him; he had got into the midst of a convention of 400 deaf mutes. . . . High in the sky it was getting crowded. The U.S. launched two more satellites—one to tell us about the weather; another to tell ships where please don't get lost. . . . Negroes were on the march. They rioted in South Africa against apartheid and were shot down. All through the U.S. South there was a nonviolent Negro protest movement the like of which never had been seen. Negro students silently sat at lunch counters for whites only. . . . Onward With Civilization Dept.: A Chicago outfit invented telescopic heels for women's shoes. You could adjust them higher or lower according to the height of your escort. In New York, a publisher of paperback books put the sniff into literature. Their covers were heavily perfumed, so you could smell your way into “The Strangers of Bombay” or “The Brides of Dracula.”

MAY 1960

Spring comes to a New York brokerage house. Its penthouse offices on the ninth floor of a skyscraper were surrounded by a garden with a lovely lawn and 550 geraniums, 480 pink and white petunias, 525 purple and white dianthembergias. There was a wishing well, which customers darn well needed in a drooping market. . . . Spring came into the heart of Princess Margaret of England, who got married in front of television cameras to a commoner (first time in four centuries) named Antony Armstrong-Jones, a professional photographer. On Princess Margaret's wedding day her stipend from

vernment was upped from \$16,800 to \$42,000 a year to keep the wolf from the happy couple's door. . . . In Washington, the government was lulled into confusion. One of our spies high on the list of the eleventh commandment: Never Get Caught. He and his partner got down. Khrushchev, chortling, wrecked the Paris summit conference supposed to have made the world sleep more easily. . . . Under the world gloom, 70,410 people—a record throng—went to the Aqueduct in New York on Memorial Day and bet \$5,560,628—a world record in one day.

JUNE 1960

Moscow gloated. Premier Khrushchev gave President Eisenhower his first personal diplomatic slap in the face. Eisenhower started across the Pacific to visit Japan. Then the Japanese Communists stirred up such violent protests that the President's visit had to be called off lest he suffer harm. . . . Here at home, the returns were in for thousands of youngsters trying to get into college next fall. The Ivy League colleges of the East had room for 13,640 high school graduates. Applicants numbered 39,380. That meant 25,740 disconsolate kids whose applications were rejected. It was the fiercest competition of all time. And yet, there were colleges and universities across the land that had room for newcomers who would receive educations comparable to (maybe sometimes better than) the Ivy League would give. . . . A quick and easy way to get education of a sort was crowded, too. A new amusement park called Freedomland was opened in New York City and 100,000 people knocked at the gates on the first day. What you could see: plastic corpses on a Civil War battlefield; the Chicago fire with real flames induced by hidden gas jets, the San Francisco earthquake with fake buildings toppling like crazy—only to be put together again mechanically for the next show. . . . And there was a new boon for people who thought they were too fat to drink your meals. Stir the two-ounce contents of an envelope into cold water. You get only 225 delicious calories, including extract of Irish moss.

JULY 1960

The husky voice of the politician echoed throughout the land as the Democrats and Republicans spotted their presidential timber. There was so little happening that the national conventions were a shade less than thrilling. Nevertheless, millions of television sets resounded with "A Man Who . . ." and "The G-r-e-a-t State Of . . ." The checker-uppers said 14 million listened to the conventions, not counting that guy who was out mixing a drink, or the guy who was dozing off. . . . Seldom in time of peace had national conventions been so overshadowed by perturbing events in other parts of the world. Cuba going Communist, maybe, in our own side yard; Russia murdering an American plane over the high seas; the brand new Republic of the Congo plunging into chaos. . . . Nevertheless, gaiety of a sort was upheld by the

... the richest American—Jean Paul Getty, Texas oilman—billion— He threw a party at his home in England, inviting guests from as far away as San Francisco. Four bars served the “non-alcoholic” guests there was a bar that served only mince of hot-dogs. Estimated cost of party: \$30,000. Estimated Getty during the eight hours it lasted: \$57,000. . . . Speaking of money at home there was a boom in gold coins, which haven’t been minted in the United States in about a quarter of a century. You could buy a rare gold piece for as much as \$6,000. . . . Far cheaper, you could buy the no-throatslide pills that burst into foam when lodged in the mouth.

AUGUST 1960

Biggest news in the entertainment field in this vacation month was that soap operas were doomed to death by the big radio networks. No longer could a housewife do her chores while listening to the adventures of *Heavenly Creatures*. And CBS announced that its last seven soap operas would fold their tearful wings before the end of the year. . . . The times were not quite so lucky for NBC Chairman Robert Sarnoff cut himself down to two secretaries instead of three. Minute Maid Corp. was saving \$80,000 a year by ridiculing its executives out of yammering too long on the long-distance phone. . . . On the other hand, times were good for some authors whose books were looked upon with profound skepticism by some literary critics. But the books were happy on the best-seller lists—*Advise and Consent*, *The Chapman Report*, and *My Darling Clementine*. In the field of music, thousands and thousands of records were selling in reference to a girl who was embarrassed by her “itsy bitsy teenie weenie yellow polkadot bikini . . . so in the water I wanted to stay.” . . . There was a new development in direct-mail advertising. A manufacturer of packaging materials mailed to prospective customers two goldfish swimming in a plastic bag calmly, which proved how smart he was at wrapping. Another advertiser by direct mail stuffed into a post office an oversized letter containing loaded dice, a marked deck of cards and a money-making machine. This was supposed to dramatize the fact that it was no gamble to deal with this steel company.

SEPTEMBER 1960

This was the month of the big bear-hug. Nikita Khrushchev buzzed New York to attend the United Nations meeting. He threw his short arms around the tall figure of Cuba’s bearded Fidel Castro every time they encountered a photographer. The political courtship seemed to catch fire, but it was just about Khrushchev’s only triumph. . . . As the number one proponent for Communism, Mr. K. had come to a land simply overflowing with press agents for various upwellings of capitalism. There were 100,000 public relations men on the loose in this country, most of them with expense accounts and industry picked up the tab of \$2 billion a year. But capitalism wasn’t beer and skittles. The mamas and grandmas who went to the supermarket

re hooligans. They stole or damaged grocery carts to the year. One dear old lady trundled her groceries home and tarts down a ravine—twenty-seven of them. . . . Nevertheless, looking up. Soon you would be able to buy a singing wrist watch, transistor radio the size of a sugar cube on the band. Wherever you go, you will never need to be without your commercials.

OCTOBER 1960

Political busy-bodies were on the march. The elections were just around the corner. So the whole great tribe known as pollsters were numbing the thumbs ringing doorbells to pry into people's predilections in order to find out who's going to win. Not only public pollsters like Gallup, but also private pollsters who work in secret for inquisitive persons such as Kennedy and Johnson. One of the polls was conducted by a Tennessee popcorn manufacturer. Every box was emblazoned with the name of either Nixon or Kennedy. Popcorn munchers in the movies and state fairs throughout the land chewed their favorite candidate. Meanwhile, Kennedy and Nixon popped into our living rooms together via TV and argued about who was the best man. . . . Maybe it was in the air. People not even running for President were getting self-conscious. Capitalizing on this, a man set up an organization called Executives On Camera (Park Ave., New York). Don't bob your head on TV by way of indicating an exclamation point, you were warned. Never peek out of the lower left-hand corner of your mouth. Another organization called Productive Communications, Inc. told great men to spend time at a mirror making faces and gestures to see how they really look to other people. . . . Speaking of elections "Miss Anti-Freeze of 1960" was chosen by the Pontiac Co., but the Whale Oil Co. was still looking for "Miss Heating Comfort of 1961."

NEWS CHRONOLOGY OF 1960

(For space chronology, see page 60)

JANUARY 1960

New nation of Cameroun born in Africa; former French colony.

Sen. John F. Kennedy announces candidacy for Democratic presidential nomination; won't accept Vice-Presidency.

Half-year steel strike settled. Union is winner.

Chancellor Adenauer of West Germany asks harsher penalties to check resurgence of Nazi-type attacks on Jews.

Eisenhower for \$79.8 billion budget with 4.2 billion surplus for debt reduction. Nixon puts hat in ring for Republican presidential nomination. Jan. 15—Opens campaign in Florida.

Egypt starts work on huge Aswan High Dam, first phase Soviet-financed.

Gambler Benedict, 18, missing Remington typewriter heiress, found in Paris

with Rumanian-born chauffeur.

11 U.S. protests to Cuba seizure of U.S. property.

14 Khrushchev promises one-third cutback in Soviet armed forces; rockets to make up for it.

15 Suicide bomb in plane blamed for Jan. 6 North Carolina air crash that killed 34.

18 Capital Airlines Viscount crashes in Virginia fog, killing all 48.

19 U.S. and Japan sign treaty of alliance and mutual security.

20 F.B.I. finds Dr. Robert V. Spears alive. He was supposedly killed in Nov. 16 air crash in Gulf of Mexico.

23 Navy bathyscaph sets world record, diving with 2 men to 7 miles under Pacific Ocean.

29 De Gaulle orders army to halt French insurrection in Algeria.

MARCH 1960

- 21 Algerians in Algeria surrender.
- 22 Soviet gunfire greets Soviet Premier Mikoyan in Havana.
- 23 Dictator Rafael L. Trujillo Organization of American states mass arrests.
- 24 "Rockers" "payola" party cost 18 companies \$117,644, Congress
- 25 Jack Paar walks out on show after NBC censored his joke.
- 26 France explodes its first atomic device in the Sahara.
- 27 Dr. James Bryant Conant "shocked" by overemphasis on athletics in junior high schools.
- 28 Russians reject U.S. plan for outlawing all but small underground nuclear explosions.
- 29 Son born to Queen Elizabeth II of Britain; third child.
- 30 Eisenhower starts Latin American tour in Puerto Rico. (Brazil Feb. 23, Argentina Feb. 26, Chile Feb. 29, Uruguay March 2.)
- 31 35 U.S. Navy men die, also 26 Brazilians, as planes collide over Rio de Janeiro.
- 32 Princess Margaret of Britain engaged to photographer, Antony Armstrong-Jones.
- 33 Senate filibuster on civil-rights bill starts; 24-hour sessions. (March 5—Official record of 82 hours, 3 minutes set.)

MARCH 1960

- 1 Earthquakes hit Agadir, Morocco. 10,000 estimated dead.
- 2 French munitions ship blows up at Havana. About 50 killed. (March 5—Castro accuses U. S. of sabotaging ship.)
- 3 U.S. puts Rep. Adam Clayton Powell, Jr., on trial for alleged income tax evasion.
- 4 John C. Doerfer quits as chairman of the Federal Communications Commission; accepted favors.
- 5 Chancellor Adenauer of West Germany and Premier David Ben-Gurion of Israel meet for first time, in New York.
- 6 East-West disarmament talks renewed in Geneva after 2½-year gap.
- 7 350 Negro student demonstrators arrested in Orangeburg, S.C., after tear-gas dose.
- 8 Eisenhower comes out for Nixon to succeed him.
- 9 63 die as Chicago-Miami Lockheed Electra plane blows up in sky over Indiana.

- 21 Police in South Africa slaughter natives protesting racial pass system. Estimated 86 die.
- 22 Baby of Queen Elizabeth II named Andrew Albert Christian Edward.
- 24 Sen. Stuart Symington, D., Mo., in Presidential race.
- 29 U.S. and Britain offer Moscow underground nuclear test ban.
- 30 South Africa under martial law as 1000 Negroes demonstrate at Capetown.

APRIL 1960

- 1 U.N. Security Council rebukes South Africa.
- 1 U.S. orbits first satellite weather watcher and gets pictures of earth's clouds back.
- 5 Sen. Kennedy wins Wisconsin Democratic primary over Sen. Humphrey, 106,000 votes.
- 8 Senate passes civil-rights bill, 71 to 25.
- 9 Prime Minister H. F. Verwoerd of South Africa wounded by assassin's shots.
- 13 Britain abandons developing chief satellite; to depend on U.S.
- 13 U.S. orbits satellite Transit 1-B to navigation.
- 14 Polaris missile fired from under ocean for first time in California.
- 19 124 die as Korean youths riot in protest against "rigged" election. U.S. rebuffs Rhee regime.
- 21 Congress completes passage of compromise civil-rights bill designed to end Negro voting.
- 23 President de Gaulle acclaimed in Washington on visit to Eisenhower.
- 26 President Syngman Rhee of Korea signs after fatal riots.
- 28 Martial law in Turkey as students against Premier Adnan Menderes' government.
- 29 Premier Chou En-lai of Red China visits to India, "upset" by talks with Nehru.

MAY 1960

- 2 Caryl Chessman executed in California after fighting off death sentence 17 years.
- 5 Khrushchev announces shooting down of unarmed U.S. plane over Russia, May 1. Pilot called a spy (May 7).
- 7 U.S. admits our U-2 plane downed in Russia was on a spy mission.
- 10 U.S.S. Triton, nuclear submarine, returns after circling globe underwater; 43 days, 15 miles in 84 days.
- 15 Russia sends into orbit biggest satellite, 4½ tons.

Chronology of 1960

Khrushchev kills Paris summit conference because of American spy plane; tells Eisenhower not to visit Russia.

Khrushchev promises no drastic action in Berlin for 6 to 8 months.

U.S. fires Atlas missile 9,000 miles beyond tip of Africa, a record.

Tidal waves from Chilean earthquakes hit Hawaii and Japan.

Israel captures top Nazi slaughterer of Jews, Adolf Eichmann, in Argentina.

U.S. orbits Midas satellite, intended to detect missile firings.

U.N. Security Council defeats, 7 to 2, Soviet resolution to censure U.S. over spy plane.

Army seizes power in Turkey, overthrowing Premier Adnan Menderes.

Lyngman Rhee, ousted President of South Korea, flies into exile in Hawaii.

Indianapolis Speedway stand falls; 2 die, 70 hurt.

Supreme Court awards states off-shore oil rights, favoring Texas and Florida.

JUNE 1960

11 22 Broadway legitimate theaters close after Actors' Equity strikes one theater. (June 13—strike ends.)

Census indicates New York City lost 100,000 population since 1957. New figure, 7,650,000.

British open largest-ever foreign trade exposition in New York.

Eisenhower, on Asian tour, gets huge welcome in Manila.

Japan cancels Eisenhower visit because of uncontrollable Leftist riots.

New mutual-security treaty with Japan ratified.

U.N. Security Council orders Israel to make "adequate reparation" to Argentina for kidnapping Adolf Eichmann, a Nazi killer of Jews.

Russia breaks up Geneva disarmament conference by walking out.

Cuba seizes U.S.-owned Texaco refinery. July 1—Seizes U.S.-owned Esso Standard and British-Dutch Shell refineries.)

JULY 1960

Congress overrides Eisenhower veto of bill to raise pay of 1½ million Federal workers.

Human blasts Kennedy as immature.

Pop-star U.S. flag becomes official.

Sen. Lyndon B. Johnson announces presidential candidacy.

Hydrogen blimp, largest in the world, crashes off New Jersey, killing 18 of 21.

Communist riots sweep Italy.

Eisenhower bars almost all remaining Cuban sugar imports.

- 8 Terror rules in new Cuba, as part of native army.
- 9 Moscow threatens rocket intervention in Cuba. Eisenhower asks U.S. to keep hands off Western sphere.
- 11 Moscow admits having shot down reconnaissance plane RB-47. Plane enters Sea July 1. (July 12—plane was 30 miles away from U.S.)
- 13 Sen. John F. Kennedy wins Democratic presidential nomination on first ballot.
- 14 U.N. votes to send troops to the Republic of the Congo (formerly Belgian) to end chaos.
- 14 Sen. Lyndon B. Johnson, runner-up to Kennedy, nominated for Democratic Vice-Presidential candidate.
- 16 Sen. Henry M. Jackson of Washington named Democratic party chairman, succeeding Paul M. Butler.
- 17 Catholics in Cuba demonstrate against Premier Castro's flirtation with Soviet Russia.
- 19 U.N. Security Council sidetracks Cuba's complaint of aggression against U.S., referring it to Organization of American States.
- 20 First 2 Polaris missiles launched from atomic submarine beneath sea off Cape Canaveral, Fla.
- 21 U.N. Security Council orders Belgium to speed removal of troops from Congo.
- 23 Cuba to sell 500,000 tons of sugar a year for 5 years to Red China.
- 24 Premier Patrice Lumumba of New Congo Republic in New York seeking aid.
- 26 U.N. rejects, 9-2, Soviet charges over RB-47 spied. Russia vetoes U.S. inquiry proposal.
- 27 Richard M. Nixon nominated by Republicans for President on first ballot.
- 28 Henry Cabot Lodge nominated for Vice-Presidency.

AUGUST 1960

- 1 Soviet demands summit conference of 82 nations at United Nations General Assembly. U.S. opposes.
- 3 U.S. scientists held first 2-way phone talks with voices bounced off moon.
- 4 U.S. test pilot, Joe Walker, pilots X-15 plane to speed record—2,196 mph.
- 5 2 missing National Security Agency agents believed to have defected behind Iron Curtain.
- 7 Cuba begins confiscation of \$770 million of U.S. property.
- 8 Congress begins "postscript session" after recess for political conventions.
- 9 Congress Republicans defeated in attempt to force new civil-rights legislation.
- 10 Senate ratifies 12-nation (including

- ... treaty to keep South
... careful.
... two telephone talks off
... balloon satellite in orbit
... up.
... move into secessionist prov-
... Katanga in the ex-Belgian
... Air Force captain makes record
... minute jump over New Mexico—19½
... es.
... sentences U-2 American spy
... yer, Francis Gary Powers, to 10 years.
... U.S. Air Force makes a historic first—
... snatching at 10,000 feet a space capsule
... released from orbit.
20 Russians recover two dogs alive from
... outer space orbit.
21 Organization of American States vote
... diplomatic break with the Dominican
... Republic under the Trujillo dictator-
... ship.
22 U.N. Security Council upholds Ham-
... marskjold in his Congo action despite
... Russia's protest.
23 Oldest human skull ever found—Zin-
... janthropus—is discovered in East Af-
... rica. Age: 600,000 years.
24 Congress votes \$3.7 billion foreign aid,
... billion less than Eisenhower asked.
25 Organization of American States con-
... demns Soviet intrusion in Latin Amer-
... ica, meaning in Cuba.
26 Time bomb kills Premier Hazza Majall
... of Jordan, a foe of Nasser's United
... Arab Republic.

SEPTEMBER 1960

- 1 Castro seizes Cuban plants of three U.S.
... rubber companies; \$25 million invest-
... ments.
2 Castro announces establishment of dip-
... lomatic relations with Communist
... China.
3 Kennedy starts presidential campaign in
... Alaska.
4 In the Congo, President Kasavubu fires
... Premier Lumumba, and Lumumba fires
... Kasavubu.
5 Two U.S. defectors from National Secu-
... rity Agency turn up in Moscow—
... Bernon F. Mitchell, 31, and William H.
... Martin, 29.
6 Hurricane Donna hits Long Island and
... New England; called costliest ever;
... losses \$29 million. Leaves 152 dead.
7 U.S. brings first sweeping civil-rights
... suit, charging Tennessee white mer-
... chants with plot to bar Negro voting.
8 Congolese Army headed by Col. Joseph
... Mobutu, says it has seized power.
9 U.S. tells U.N. Reds hope to make
... Congo satellite.
10 Congo strongman, Col. Mobutu, orders
... Russians out; they start leaving.
11 U.S. orders Panama flag flown alongside
... American flag in Panama Canal Zone.

- 12 U.N. Assembly special session (nati-
... to 0 to tell Russians hands off
... 15th U.N. General Assembly elec-
... erick H. Boland of Ireland Presi-
... nary
... feating Soviet candidate.
22 U.N. elects 13 new members from A-
... plus Cyprus.
23 Khrushchev addresses U.N., calling
... ouster of Hammarskjold.
24 Kennedy and Nixon clash in first p-
... dential TV debate.
25 Eisenhower and Macmillan meet;
... on U.N. to press for disarmament.
26 Khrushchev interrupts Macmillan
... speech with unprecedented shout
... from the floor.
27 Crown Prince Akihito of Japan
... commoner wife, Princess Michiko,
... New York.

OCTOBER 1960

- 1 Nigeria, largest of new African nati-
... becomes independent member of C-
... monwealth after British rule. Adm-
... to U.N. as 99th member Oct. 7.
2 Eisenhower rejects U.N. neutrals'
... for talk with Khrushchev.
3 Hammarskjold defies Khrushchev;
... fuses to quit U.N. post.
4 Eisenhower becomes oldest man ever
... White House; 11 days short of
... birthday.
5 Electra plane crashes at Boston t-
... off; 61 dead, 11 saved.
6 Union of South Africa votes to bec-
... a republic.
7 Nixon and Kennedy in second TV
... bate.
8 U.N. by eight votes bars debate on
... mitting Red China.
9 Bomb injures 32 in New York's T-
... Square subway; third unexplained
... in that area.
10 Khrushchev ends 25-day visit to
... for U.N.
11 Second Kennedy-Nixon television
... debate; Quemoy again topic.
12 Cuba executes two Americans as
... Castro invaders; a third was shot
... 13.
13 14 TV quiz winners, including Ch-
... Van Doren, arrested on perjury cha-
... 14 National League expands to ten te-
... adds New York and Houston.
15 Casey Stengel dismissed as manage-
... Yankee baseball team.
16 U.S. bans nearly all exports to
... (Oct. 20—Recalls U.S. Ambassade
... Cuba.)
17 Fourth Nixon-Kennedy TV debates
... 18 Nation-wide General Electric strike
... tied on terms about the same as on
... by the company three weeks ago.
19 Rev. Martin Luther King, Negro
... gration leader, sentenced to four mo-
... in jail for lacking driver license
... Georgia.

Christian League expands. Washington, D.C. led by new team, shifts to Minneapolis. Los Angeles gets franchise.

U.S. arrests two as Russian spies, one in them an employee of the United Nations Secretariat.

U.N. decides to send 15-man Asian-African conciliation team to Congo.

Castro mobilizes 200,000 Cuban militiamen to defeat mythical American invasion.

Queen of Iran, Farah Diba, gives birth to a boy, long wanted by Shah as heir to the throne.

NOVEMBER

- 1 Britain to give U.S. a Polaris base in Scotland.
- 3 Newest U.S. satellite, Explorer, orbit with eight scientific instruments.
- 3 Nobel Prize in Chemistry awarded Dr. Willard F. Libby; physicist. Prof. Donald A. Glaser. Both University of California.
- 7 Nixon makes four-hour talk, sets record for Presidential campaign.
- 8 John F. Kennedy and Lyndon B. Johnson elected.

DIED—Nov., 1959 to Nov., 1960

Name	Age	Day	Name	Age
NOVEMBER 1959				
BAER, Max (fighter)	50	23	PITCAIRN, Harold F. (aviation pioneer)	62
BRYSON, Lyman (educator)	71	18	RUML, Beardsley (economist)	65
LANGER, William (Sen., N. D.)	73	MAY 1960		
MALLORY, Molla B. (tennis star)	67	14	BORI, Lucrezia (opera star)	71
McLAGLEN, Victor (actor)	72	27	FLAGG, James Montgomery (illustrator)	82
VILLA-LOBOS, Heitor (composer)	72	7	KILPATRICK, John Reed (sports leader)	70
DECEMBER 1959				
CRUM, Bartley C. (attorney)	59	30	PASTERNAK, Boris (author)	70
DUNCAN, Rosetta (entertainer)	58	11	ROCKEFELLER, John D., Jr. (philanthropist)	86
GRAY, Gilda (actress)	60	10	SCHWARTZ, Maurice (Yiddish actor)	69
HOPPER, Edna Wallace (actress)	80-95	JUNE 1960		
WOOD, Edward F. Lindley (Earl of Halifax)	78	20	KELLY, John B., Sr. (industrialist)	70
JANUARY 1960				
BARRYMORE, Diana (actress)	38	1	PATRICK, Lester (hockey star)	76
CAMUS, Albert (author)	46	26	SHIPSTEAD, Henrik (politician)	79
NICHOLS, Dudley (screen writer)	64	20	SIMONS, Frieda Hennock (member F.C.C.)	55
SHUTE, Nevil (author)	60	JULY 1960		
SUCKOW, Ruth (author)	67	12	ADLER, E. Maurice (Buddy) (movie producer)	51
SULLAVAN, Margaret (actress)	48	6	BEVIN, Aneurin (British Laborite)	62
FEBRUARY 1960				
ADLER, Felix (psychoanalyst)	62	2	FOWLER, Gene (author)	70
CLARK, Bobby (comedian)	71	16	MARQUAND, John P. (author)	66
PURVIS, Melvin (F.B.I. agent)	56	24	MATTHEWS, A. E. (British actor)	90
STEPINAC, Alojzije (Cardinal)	61	15	TIBBETT, Lawrence (opera star)	63
YUST, Walter (editor)	65	AUGUST 1960		
MARCH 1960				
ADAMS, Franklin P. (columnist, author)	78	7	FIRPO, Luis Angel (fighter)	65
ANDREWS, Roy Chapman (Dr.) (zoologist, explorer)	76	23	HAMMERSTEIN, Oscar, 2nd (?)	65
KEITH, Ian (actor)	61	8	WALKER, Danton (columnist)	61
LARDNER, John (writer)	47	SEPTEMBER 1960		
NEUBERGER, Richard L. (Sen.)	47	5	LONG, Earl K. (politician)	65
THOMSON, Mary Agnes (Polly) (Helen Keller's teacher)	75	26	POST, Emily (etiquette author)	86
WARREN, Leonard (opera star)	49	6	SAVO, Jimmy (entertainer)	64
WINDUST, Bretagne (author)	54	OCTOBER 1960		
APRIL 1960				
CUNNINGHAM, Elijah William (Bill) (writer)	64	10	RUYSDAEL, Basil (radio announcer)	72
		6	WELCH, Joseph N. (attorney)	69
		NOVEMBER 1960		
		5	BOND, Ward (actor)	55
		2	MITROPOULOS, Dimitri (conductor)	64
		5	SENNETT, Mack	80

HEADLINE STORIES OF 1960

NEGRO SIT-INS

A remarkable wave of demonstrations by young Negroes, mostly students, began early in 1960 and spread through the states of the South during

the summer. The Negroes were protesting against racial discrimination at lunch counters, especially those at chain stores such as Woolworth's. Whites could be served at the counters but not Negroes. (See photo on page 120.)

The technique of the demonstration was novel. The Negroes would sit quietly and peacefully to the lunch counters and just sit there, although refusing service. That filled up the counters and blocked normal business. On a few occasions there were disturbances when young whites tried to drive Negroes away from the counters. There was almost no violence, however, because the Negroes had been trained by their leaders to passive resistance.

The demonstration spread to the North, but this time carried on mainly by white students. They would picket chain stores in protest against discrimination practiced by their branches in the South.

Business was hurt both North and South. Losses in variety stores ranged from 15 to 65 per cent. The Negroes' passive protest against segregation had a telling economic effect.

The first big break in the lunch counter sit-in came in Nashville, Tennessee, in May. Six counters previously serving whites only were opened to Negroes after bi-racial civic negotiations that had lasted for weeks. The Negroes agreed to make the process gradual—not to swamp the counters, but to patrol them in twos and threes at first. Things went with smoothness that surprised many.

The next development regarding the lunch room sit-ins came completely without fanfare. United States Attorney General William P. Rogers entered the picture. He worked by persuasion rather than prosecution. He argued that further progress in racial integration was in the national interest because the standing of the United States in the world suffered from reports of racial discrimination.

A major result of Rogers' intervention became known in August. In six of nine Southern communities, lunch counters previously white-only had been opened to Negroes.

CIVIL RIGHTS

Civil-rights legislation has been a controversial issue in Congress for roughly 90 years. The broad goal has been to prevent Negroes from being discriminated against in matters such as voting, schooling and employment.

On May 6 a civil-rights bill was signed into law by President Eisenhower. It was only the second civil-rights law passed since the Reconstruction period after the Civil War. Numerous others had been blocked by Southern members of Congress by resort to the filibuster in the Senate.

There was a filibuster this time, too. This made the debate the longest

the Senate on a single topic in this century—Feb. 15 to April 11. The credit for getting the bill passed was widely attributed to the man who favored it—Sen. Lyndon B. Johnson, D., Texas.

The new law was primarily designed to assure Negroes of the right to vote. In many counties in the South there were hundreds of Negroes, some of whom voted. Pressures or questionable restrictions prevented them from doing so. The law provided Federal help to Negroes in places where a pattern of discrimination against their voting was found to exist.

In such instances a Federal judge could appoint voting referees. Their duty would be to see that qualified Negroes were allowed to register and vote and that their votes would be counted.

AFRICA

For the continent of Africa, 1960 was a historic year. More new sovereign nations were created in Africa during the year than have ever been born in any one year in history. Some of them had been dominated for centuries by European colonialism.

In 1945 there were only four independent nations in the whole continent. At the beginning of 1960, there were 10. Late in 1960, the number of independent nations was approaching 25.

The new countries, freed from colonial rule, were being courted both by the Soviet Union and the Western powers. Many of them have rich resources to be developed, and they offer potential markets for the products of industrial nations.

Britain and France tried to prepare their colonies for independence, and in the whole the transition was orderly.

The Belgian Congo

Belgium did not adequately prepare its vast Congo colony in the heart of Africa for independence. There were virtually no Congolese trained as technicians to operate the electric light system or the water works; there were virtually no native physicians. When a Congolese secretary was hired for an administrative division, she was told that you punch a typewriter key and it produces on the paper the letter "A." She was told that when she learned to read, she could be a typist.

The Belgian Congo covers an area in the heart of Africa that is comparable to the Eastern part of the United States. It has a population of 13½ million and numerous tribes, some hostile to each other.

The Congo became an independent nation on June 30, after 75 years as Belgian colony. It called itself The Republic of the Congo, causing some confusion, because the same name had already been taken by the much smaller French Congo that achieved its independence from France on Aug. 1, 1960. The two are separated by the Congo River.

The first Premier of the new (Belgian) Congo Republic was Patrice Lumumba, a former postal clerk. The President, whose powers were mainly ceremonial, was Joseph Kasavubu, whose mother was a native and whose father was a Chinese coolie, imported for railway work in the late 1880s.

... in the Congo within a week after independence. Mutinies broke out in the 20,000-man Force Publique, the native African army. The army demanded that their white Belgian officers be ousted and replaced by Africans who had no experience in military command. There were stories of attacks on whites by the mutinous soldiers. Thousands fled in terror. Thus the Congo was left with little capacity to resist aggression. Belgium dispatched troops by plane to protect the lives of Belgian citizens there. By treaty, Belgium retained two military bases in the new Congo. Premier Lumumba's government appealed to the United Nations to protect the Congo from "aggression" by the Belgians. Acting swiftly, the U.N. sent troops, mostly Africans such as those from neighboring Ghana. Later there were Swedish, Irish and Canadian contingents. The total grew to 16,000.

The U.N. was acting under a Security Council resolution that called upon Belgium to withdraw its troops from the Congo. The function of the U.N. force was to preserve peace and order so that it would be unnecessary for Belgian forces to remain in the newly liberated Congo. A factor that expedited U.N. action was a threat by Premier Lumumba to call for help from the Communist part of the world unless the U.N. entered the scene. The Soviet Union announced its willingness to help the Congo get rid of Belgian military forces. (See photo on page 106.)

Inter-Tribal Warfare

The situation in the Congo was enormously confused. Tribes there were at war with each other. For example, the Baluba tribe fought the Kaldia tribe. Another problem was that one of the provinces of the Congo, Katanga in the south, declared its intention to secede from the rest of the Congo. Katanga was the richest of the provinces in natural resources—copper and minerals. Elements of the former Belgian rulers remained there.

U.N. Secretary General Dag Hammarskjöld flew twice to the Congo in an effort to get things straightened out. The Security Council gave him its backing, despite complaints from the Soviet Union that he was not being as impartial as the U.N. should be.

The alleged partiality of Hammarskjöld in the Congo grew out of the fact that three men were striving to gain control of the central government in Leopoldville. One was President Kasavubu; another was Premier Lumumba; and a third one entered the picture. He was Col. Joseph Mobutu, who claimed control of the Congo army. He said he was the actual ruler. But his soldiers continued to run wild. Anything the U.N. troops in the Congo did was liable to be displeasing to one of the rivals for power.

At the end of October, Hammarskjöld consulted the eighteen nations that had contributed to the United Nations force in the Congo and decided to send a fifteen-man conciliation team there in the hope of bringing about peace and order. The nations represented on the team were Ethiopia, Ghana, Guinea, India, Indonesia, Liberia, Mali, Malaya, Morocco, Nigeria, Pakistan, Senegal, Sudan, Tunisia and the United Arab Republic (Egypt-Syria).

COLD WAR

The East-West cold war and the violence of Premier Khrushchev grew in intensity.

On May 1 a United States U-2 plane was brought down from an altitude of 8,000 feet near Sverdlovsk in the Soviet Union, 1,300 miles inside the border from the start of the flight in Peshawar, Pakistan. When Moscow announced the downing of the plane, the United States said it was a weather plane that might have strayed across the Soviet border. This was a stock explanation, since the tradition long has been that nations never admit activities related to espionage.

Our stock explanation did not hold up, since the Russians had the pilot, Francis Gary Powers, alive. They also had what they said were maps and instruments and films from his plane. The Russians said they downed the plane by anti-aircraft rocket. United States experts doubted that the Russians could hit a target that high by rocket. Powers was said to have parachuted to earth.

Contrary to tradition, President Eisenhower acknowledged that our U-2 was a reconnaissance plane. "It is a distasteful but vital necessity," he said, "to know as much as possible about military affairs in the Soviet Union, where there is a fetish of secrecy and concealment." The safety of the whole free world, he said, depends on guarding against another surprise attack such as Pearl Harbor.

The U-2 was designed for high reconnaissance that had been going on over the Soviet Union for four years. The Russians apparently knew there were such flights but previously had been unable to bring down a U-2.

The United States found out about Soviet atomic missile bases, location of war planes, submarine production and anti-aircraft emplacements by means of electronic and photographic equipment aboard the planes.

The downed U-2 pilot, Powers, was put on trial as a spy on his thirty-first birthday, Aug. 17. His father, mother and wife were in the courtroom of the Soviet military tribunal.

The trial was strictly a propaganda show. The purpose was to prove to the world what the Russians called the "aggressive actions" of the United States. Powers played along with the Russians to some extent. He pleaded guilty to making the flight over the Soviet Union (which he obviously had to admit). Referring to the flight, he said, "I am sincerely sorry I had anything to do with it."

Powers' defense was that he was acting under orders as a flyer, but aware that he was on reconnaissance. His pay was \$30,000 a year. The Soviet prosecutor did not urge the death penalty for Powers, which would have been possible under Soviet law for a convicted spy. Instead, Powers was sentenced to ten years of "deprivation of liberty," three of which years would be in prison. The implication was that the other seven years would be in a Russian forced labor camp.

Khrushchev himself had urged the holding of a summit conference in a year. It was set to open in Paris on May 16, 1960. President Eisenhower and Prime Minister Macmillan went to Paris; so did Premier de Gaulle; and President de Gaulle was the host. Khrushchev broke up the conference before it even got started. His pretext was the American U-2 "spy flight" in the plane that was downed over the Soviet Union. He refused to enter into negotiations unless the United States did three things: (1) Apologize for the spy flight; (2) Promise never to violate Soviet air space; and (3) "Punish those directly guilty of such actions."

Eisenhower had ordered cessation of the U-2 spy flights on May 12, so that the Soviet demand already had been taken care of. The other two Khrushchev demands were rejected by Eisenhower. At the same time Khrushchev withdrew his invitation to Eisenhower to visit the Soviet Union. The visit was to have been in June.

The three Western heads of government met without Khrushchev on May 17. They issued a statement expressing "regret that these discussions, so important for world peace, could not take place."

Japan Trip Off

The next harsh blow struck by the Communists in the cold war was the work of Communist-led rioters in Japan. (See photo on page 124.)

President Eisenhower planned an Asian tour, the climax of which would have been a visit to Japan. He left June 12, stopping in Alaska, the Philippines, and Formosa.

Meanwhile, the scale and violence of student riots in Japan had grown to an alarming degree. In them the Communists found support from Socialist youths. The avowed purpose of the riots was to kill the new mutual-security treaty with the United States that was about to be ratified. (It was ratified despite the riots, but Premier Nobusuke Kishi was forced out of office.)

By the time Eisenhower reached Manila, the Tokyo riots had got so bad that the Japanese government unhappily requested that Eisenhower cancel the visit. There was fear for his personal safety. He did make a brief visit to Seoul, South Korea, and then headed back for home.

Moscow gloated. Said "Izvestia": "The cancellation of the Eisenhower visit to Japan is really a major blow to the prestige of the President of the U.S., to all American policies."

It was anybody's guess as to whether Khrushchev was deliberately trying to heighten the tension in the cold war. But that was the effect of his actions and there was more to come.

Arms and the RB-47

At the end of June, Premier Khrushchev blew up the 10-nation disarmament conference that had started in Geneva the previous March 15, with an equal number of nations from East and West conferring.

Soviet Deputy Foreign Minister Valerian A. Zorin led his delegation in a walk-out just before the West was to have presented new proposals. The cause was an assertion that the Western nations were stalling in order to shield their own build-up of armaments.

On July 1, the Russians shot down an American RB-47 reconnaissance plane flying from a British base, which the Russians said was over Soviet airspace. We had tracked the plane by secret electronic devices, and it was about 50 miles away from Soviet territory over the Barents Sea in the northern part of the Arctic. Four of the six crew members were lost. Two were taken prisoner by the Russians and held prisoner.

The Soviet Union asked the U.N. Security Council to order the United States to halt its "aggressive actions." The United States denied we had violated the Soviet air space and suggested independent inquiries to prove this. The Security Council backed the United States and approved an impartial inquiry. The Soviet Union vetoed the resolution.

CUBA

Throughout the year, Cuba's revolutionary regime headed by Premier Fidel Castro (took power Jan. 1, 1959) became more and more hostile to the United States. And the suspicion grew that Communist influence in the regime was getting stronger.

This was a matter of deep concern for the United States, in view of the fact that Cuba lies only about 60 miles from the coast of Florida. President Eisenhower stated that we could not allow it to become a Communist base. The United States has an important naval base in Cuba at Guantanamo Bay. Our use of it is pledged by long-term treaty. It stands as a guard for the Caribbean area, and particularly for the vital Panama Canal. Castro made some minor harassing moves, but no major move toward ousting the United States from Guantanamo Bay. The possibility of trouble existed, however.

In the course of 1960, Castro's major attack on the United States was economic. He confiscated nearly all of the American-owned properties in Cuba, the value of which was about a billion dollars. There was no observable prospect of his paying for them.

The Cuban seizures of American-owned properties included the following: sugar mills; oil refineries owned by Esso, Texaco and Sinclair; the United Fruit Co.; the Cuban Electric Co.; the Cuban Telephone Co.

Russia agreed to buy a million tons of Cuban sugar a year for five years, paying the world price of about 3 cents a pound. The United States had been buying about one-half of Cuba's sugar output under our government-fixed sugar purchase quota. Our payment was about 5 cents a pound.

Congress passed a new sugar law on July 3 authorizing President Eisenhower to reduce or suspend purchases of sugar from Cuba for the rest of 1960 and the first three months of 1961. Three days later, President Eisen-

ed reduction of Cuban sugar imports by 850,000 tons, meaning a loss of some \$92 million. Our purchase quota for 1960 had been 1,200,000 tons, about one-third of U.S. consumption.

Recent recriminations between the United States and Cuba grew more bitter. This country accused Cuba of "relentless economic aggression" and its illegal seizure of American property. Cuba appealed to the United Nations Security Council, accusing the U.S. of "repeated threats, harassment, intrigues, reprisals and aggressive acts."

The Security Council voted 9 to 0 to refer the matter to the Organization of American States. The O.A.S. sided with the United States. On Aug. 28, 1960, the O.A.S. voted for a resolution condemning Soviet and Chinese interference in Latin America. Cuba was not specifically mentioned, but the object was clear.

Russia had gotten into the act. Premier Khrushchev threatened to launch atomic rockets against the U.S. if we should intervene in Cuba by force. President Eisenhower replied that we could not permit international Communism to take over Cuba.

The great majority of Cubans are Roman Catholics, and the Church came alarmed about Castro's course. A pastoral letter read in all Catholic churches in Cuba voiced concern over "the increasing advance of Communism in our country."

Nevertheless, Castro continued his pro-Communist course. On Sept. 22, 1960, he announced that he would break diplomatic relations with Nationalist China (Formosa) and establish relations with Communist China. Thus Cuba became the first Western Hemisphere nation to recognize the Red Chinese regime at Peiping.

On Oct. 19 the United States government took another economic measure against Cuba. Most American exports to Cuba were forbidden under a presidential embargo order. Exceptions were certain foods and medical supplies, which could continue to be exported.

The State Department said the purpose was to help American businessmen caught in Castro's "discriminatory, aggressive and injurious economic policies." Cuba owed \$150 million to U.S. firms for goods exported there, but was not paying its debts.

The export embargo was expected to pinch Cuba by cutting off supplies of parts needed to keep in operation its factories, oil refineries, sugar mills and automobiles. Cuba hoped that the necessary parts and machinery could be obtained from Communist countries such as Russia and Czechoslovakia.

In retaliation for the U.S. export embargo, Cuba confiscated 167 million American-owned firms valued at \$250 million on Oct. 25. The seizure brought the total value of U.S.-owned lands and business properties to \$1.5 billion.

Remaining American firms as yet not seized by Cuba were chiefly small ones to the number of 213, valued at less than \$100 million. The State Department denounced the new seizures as "Communist dogma," and said the Cuban people were "being economically exploited for foreign political poses."

UNITED NATIONS

Never in the history of the world had so many leaders of nations gathered for one international gathering. To the fifteenth session of the United Nations General Assembly in New York came the top men of 24 countries. In the precise manner of the U.N. Secretariat, they were classified as 11 "heads of state," meaning kings or presidents, and 13 "heads of government," meaning prime ministers. Actually, there were more; the U.N. Secretariat was puzzled about how to classify bosses of Communist states who only bore the title of party secretary, while somebody else had a loftier title and no power. For good measure, there also were 57 foreign ministers.

To list a few of these world leaders, there were present, at one time or another in the early weeks of the General Assembly session that opened Sept. 10, 1960, men such as:

President Eisenhower, Prime Minister Macmillan, Premier Khrushchev, President Marshal Tito of Yugoslavia, Prime Minister Nehru of India, President Nasser of the United Arab Republic, Premier Castro of Cuba, King Hussein of Jordan. All the Communist satellites sent their top men, such as Kadar of Hungary and Gomulka of Poland.

Included in this illustrious assemblage were the first representatives of 16 new African nations. They formerly had been colonies of European countries such as France, Britain, Belgium; and now they had become independent. Cyprus, another former British dependency, was also admitted. This brought the membership of the United Nations up to 99. When the U.N. was founded in 1945 it had 51 members; now it has almost doubled.

Khrushchev's Summit Idea

Soviet Premier Khrushchev was the person most responsible for the assemblage of high-ranking leaders. He had said in advance that he wanted a "summit" meeting at the U.N. General Assembly. It was a "summit" in the sense of the importance of the people there. It was not a "summit" in the sense of world leaders getting together among themselves in formal meetings with a planned agenda.

For example, President Eisenhower declined to meet with Premier Khrushchev because of Khrushchev's previous breaches of international good conduct. Eisenhower did have private talks with many of the other leaders present at the U.N. session. So did Khrushchev, notably with Premier Castro of Cuba.

Khrushchev kept himself in the publicity spotlight during the 25 days he was attending the General Assembly session. He resorted to methods that most of the Assembly regarded as boorish. He pounded his clenched fists on his desk when a speaker said something he did not like. He interrupted Prime Minister Macmillan's formal address by rising and shouting at him.

The climax of Premier Khrushchev's disruptive boisterousness in the Assembly came on Oct. 12, when he threw the session into the most dis-

in its history. He took off his right shoe and waved it menacingly at the speaker who angered him, as though to throw the shoe at him. He then threw the shoe loudly on his desk. The commotion got so bad that the meeting adjourned until the following day.

One of the main goals of Khrushchev was to transform the United Nations Secretariat into a mechanism subservient to the Soviet will. He demanded that the Secretary General Dag Hammarskjöld be dismissed and that a triumvirate be placed in his place as head of the Secretariat administering the functions of the U.N. The triumvirate would be composed of one man from the Communist bloc, one from the western bloc and one from the so-called "neutral nations" not avowedly aligned with either power bloc. Under Khrushchev's proposal, each of the three men operating the Secretariat would have the power of veto over any action.

That meant that the Soviet Union would be able to stop any action of the U.N. Secretariat that it did not like. In the view of most delegates in the General Assembly session, this would mean a deadly paralysis of the U.N. For example, the U.N. could not send forces into the new Republic of the Congo (formerly Belgian) to restore order, as it was now doing under the guidance of Hammarskjöld.

Congo Action Assailed

The U.N. action in the Congo was Khrushchev's immediate motive for wanting to get rid of Hammarskjöld and reorganize the Secretariat. The Soviet Premier was angry because Hammarskjöld's policy of neutrality in directing the U.N. forces in the Congo had the unintentional result of letting the original Premier, Patrice Lumumba, a pro-Communist, slip out of power in the Congo chaos. Thus the Soviet ambition to turn the Congo into a Communist satellite was thwarted.

Hammarskjöld refused to accede to the Soviet demand that he resign. "I am resigning," he told the Assembly, "I would throw the organization to the winds." The big ovation that the Assembly gave to Hammarskjöld as he finished his speech indicated that there was no likelihood that the drastic Khrushchev proposal would be accepted.

Several other defeats were suffered by Premier Khrushchev.

As usual, the Soviet Union (now represented for the first time by Khrushchev) tried to get Communist China admitted to the United Nations through an exhaustive debate and vote in the General Assembly. As it has for the last decade, the United States contended that Red China did not qualify as a peace-loving state, and supported a resolution to postpone Assembly debate for at least a year. The vote in favor of the United States resolution and against Red China was 42 to 34, with 22 abstentions. From the Communist point of view this vote was a little better than last year, when Red China lost by 44 to 29, with nine abstentions.

Two items in particular Khrushchev tried to keep off the Assembly agenda.

he was the topic of Russia's bloody crushing of the anti-Communist revolution in Hungary in 1956. He lost by a vote of 54 to 12, with 31 abstentions. He tried in vain to keep off the agenda the topic of Communism in the West of Tibet. This time Khrushchev lost by a vote of 49 to 12, with 31 abstentions.

Disarmament was one of the favorite themes of Khrushchev. He proposed a 10-year length the Soviet plan. This called for total disarmament within 10 years. After total disarmament—not before—Khrushchev would consent to international inspection and control. This was entirely unacceptable to the West, which wanted disarmament to proceed step by step, with inspection as a first step of the way to make sure nobody cheated. The Russian attitude toward disarmament in the West was stalling while building up its military strength.

Just before Khrushchev left New York by plane for Moscow, he tossed out a threat at the United States: "If you want war, keep provoking it and you will get it."

The 99 Members of the United Nations, 1960

Country	Joined U.N. Organization ¹	Country	Joined U.N. Organization ¹	Country	Joined U.N. Organization ¹
Afghanistan	1946	France	1945	Nicaragua	1945
Albania	1955	Gabon Rep.	1960	Niger, Rep. of the	1960
Argentina	1945	Ghana	1957	Nigeria	1960
Australia	1945	Greece	1945	Norway	1945
Austria	1955	Guatemala	1945	Pakistan	1947
Belgium	1945	Guinea	1958	Panama	1945
Bolivia	1945	Haiti	1945	Paraguay	1945
Brazil	1945	Honduras	1945	Peru	1945
Bulgaria	1955	Hungary	1955	Philippines	1945
Canada	1948	Iceland	1946	Poland	1945
Czechoslovakia	1945	India	1945	Portugal	1955
Dominican Republic	1955	Indonesia	1950	Rumania	1955
Egypt	1960	Iran	1945	Saudi Arabia	1945
El Salvador	1945	Iraq	1945	Senegal, Rep. of	1960
Equatorial African Rep.	1960	Ireland	1955	Somalia, Rep. of	1960
Ethiopia	1955	Israel	1949	Spain	1955
Finland	1960	Italy	1955	Sudan	1956
France	1945	Ivory Coast, Rep. of the	1960	Sweden	1946
Ghana	1945	Japan	1956	Thailand	1946
Guatemala	1945	Jordan	1955	Togo	1960
Haiti	1945	Laos	1955	Tunisia	1956
Honduras	1945	Lebanon	1945	Turkey	1945
Hungary	1955	Liberia	1945	Ukraine	1945
Iceland	1946	Libya	1955	Union of South Africa	1945
India	1945	Luxembourg	1945	U.S.S.R.	1945
Indonesia	1950	Malagasy Rep.	1960	United Arab Rep. ²	1945
Iran	1945	Malaya, Fed. of	1957	United Kingdom	1945
Iraq	1945	Mali, Rep. of	1960	United States	1945
Ireland	1955	Mexico	1945	Upper Volta, Rep. of the	1960
Israel	1949	Morocco	1956	Uruguay	1945
Italy	1955	Nepal	1955	Venezuela	1945
Ivory Coast, Rep. of the	1960	Netherlands	1945	Yemen	1947
Japan	1956	New Zealand	1945	Yugoslavia	1945
Jordan	1955				
Laos	1955				
Lebanon	1945				
Liberia	1945				
Libya	1955				
Luxembourg	1945				
Malagasy Rep.	1960				
Malaya, Fed. of	1957				
Mali, Rep. of	1960				
Mexico	1945				
Morocco	1956				
Nepal	1955				
Netherlands	1945				
New Zealand	1945				

¹ The U.N. officially came into existence on Oct. 24, 1945. ² Formed by the union in 1958 of Egypt and Syria. Had joined the U.N. in 1945.

ELECTIONS—1960

g the Presidency, John Fitzgerald Kennedy set some records. He was the youngest man ever elected to the Presidency. There was no President, Theodore Roosevelt, who was forty-two as compared with Kennedy's forty-three years. But Theodore Roosevelt was not elected at all. He succeeded to the Presidency when President William McKinley was killed by an assassin's bullet in Buffalo, N.Y. on Sept. 14, 1901. Kennedy was the first Roman Catholic to be elected to the Presidency. The other Catholic to be nominated by a major party was Alfred E. Smith in 1928. He lost to Herbert Clark Hoover by 444 electoral votes to 8. The Democratic victory—the first in eight years—carried to the White House by President Lyndon Baines Johnson, and set a record there, too. Johnson was the first man to be elected on the same day to two high offices in the nation. Not only was he elected Vice-President, but also he was reelected as Senator from Texas. He gave up the Senatorial office.

The defeated candidates were Richard M. Nixon and Henry Cabot Lodge.

The number of popular votes cast in the 1960 election was in the neighborhood of 67 million, which was the largest in United States history. This was one of the closest elections in history.

Kennedy's margin of victory (unofficial returns) was less than one per cent of the votes cast. To get a comparison, one has to go back to 1880, when James A. Garfield defeated Gen. Winfield Scott Hancock by 7,000 votes out of 8.8 million, which was a margin of 0.8 per cent.

There have been, however, instances in which a candidate has lost the popular vote and yet won the election on the basis of the electoral votes received from large states. Rutherford B. Hayes lost the popular vote in 1876 but won the Presidency. So did Benjamin Harrison in 1888.

THE CAMPAIGN

In the preliminaries of the 1960 election campaign, Vice-President Nixon was endorsed by President Eisenhower. The only possible rival for the Republican Presidential nomination was Gov. Nelson A. Rockefeller of New York, who withdrew his candidacy. Rockefeller did, however, strongly influence the Republican platform. In a midnight meeting with Nixon in New York, he obtained a liberalization of the platform, and then gave his support to Nixon for the nomination at the Republican National Convention in Chicago later that month.

Nixon was nominated on the first ballot after the withdrawal of conservative Sen. Barry Goldwater of Arizona, who got ten votes. Nixon chose as his running mate for Vice-President the American Ambassador to the United Nations, Henry Cabot Lodge.

A strenuous course to obtain the Democratic Presidential nomination was pursued by Sen. John F. Kennedy of Massachusetts. He went into the

ate primaries and won them all. Among the rivals he defeated were Sen. Hubert H. Humphrey of Minnesota and Sen. Wayne Morse of Oregon. On the first ballot Kennedy was nominated with 845 votes, while Senator Lyndon B. Johnson of Texas with 409 votes, mostly from the South, chose Johnson as his running mate, thereby hoping to bridge the North-South split in the Democratic party.

The most unusual feature of the campaign was a series of five television debates between Kennedy and Nixon. Never before had such a series of Presidential candidates taken place within television view of as many as 100 million Americans in their homes.

There was no way of telling who "won" the debates, but most observers thought Kennedy gained an advantage from them, inasmuch as he became a nationally known figure with a rapidity otherwise impossible. Nixon, of course, already had been a nationally known figure.

Kennedy proposed a fifth television debate, but negotiations for it conducted by his representative and Nixon's broke down amid some bitterness. Kennedy charged Nixon with "bad faith" in the negotiations. Nixon's representative said there could be "no further negotiations unless Sen. Kennedy apologizes."

Issues of Debate

In the television debates, two foreign affairs issues loomed large. One concerned the problem of two small islands just off the coast of Communist China—Quemoy and Matsu. They are held by the Nationalist Chinese government on Formosa, about 100 miles away across the Strait of Formosa. The question was whether the United States should help defend them if the Red Chinese tried to conquer them.

Kennedy and Nixon were not far apart on the issue. However, Nixon was more eager for the United States to defend the islands, while Kennedy doubted whether the islands could or should be defended.

Cuba also figured in the debates, in view of the increasingly pro-Communist position of Premier Fidel Castro. Nixon favored "quarantining" Castro, but did not go into detail as to how this should be done. Kennedy favored helping persons both inside and outside of Cuba who wanted to overthrow Castro.

Nixon called the Kennedy approach "dangerously irresponsible." Nixon asserted that helping Castro enemies would be a form of intervention prohibited by the Organization of American States and therefore would lay the United States open to hostile criticism in Latin America. Kennedy replied that he did not mean physical intervention in Cuba; he meant giving moral support to Castro enemies by radio and other means of communication.

One of the issues dwelt upon was the prestige of the United States. Nixon said it was at "an all-time high." Kennedy asserted that Nixon was "misperceiving" the public and that there had been a dangerous decline in America's prestige throughout the world. He saw it as a peril to our leadership and our

...cation was that Nixon would be complacent, whereas K

...d stir the nation into more energetic activity.

...veys had been made abroad about the prestige of the Unit

...were made by the United States Information Agency for t

...guiding its work. The Administration tried to keep these secr

...cized by the Democrats for concealment with a political moti

...of these polls was that American prestige had declined. Peo

...questioned in Europe believed that the United States either v

...inferior to the Soviet Union in military power, or soon would

...the Soviet Union was ahead of America in scientific achievement

...space shots.

...tion of the religious issue—Kennedy being a Roman Catholic—w

...plicity deplored by both candidates. The issue was mostly under the s

...face, but it kept cropping up in the form of sermons by Protestant minist

...and in the form of leaflets circulated furtively. Kennedy sought to assure

...people that he believed in separation of Church and State and that his

...ligion would have no bearing on his conduct if elected.

The religious issue continued to simmer throughout the campaign. Va

President Nixon charged that "the Kennedy camp is attempting to exp

the religious issue to solidify what they regard as 'a Catholic vote.'"

Former President Harry S Truman, campaigning for Kennedy, mad

comment. Referring to the religious issue, he said in a Seattle speech: "I

of the saddest things about this whole sorry business is that some of

activity is carried on through our Protestant churches with political mo

contributed for the purpose to avoid paying income taxes."

JOHN F. KENNEDY

The 35th President of the United States, who will be inaugurated at m

on Jan. 20, 1961, will be John Fitzgerald Kennedy, a Democrat. He was b

in Brookline, Mass. on May 29, 1917, into a wealthy Catholic family.

father, Joseph P. Kennedy, was American Ambassador to the Court of

James from 1937 to 1940. There were nine children. John F. Kennedy,

his wife, the former Jacqueline Lee Bouvier, have a daughter, Caroline,

Nov. 27, 1957, and at the time of the election were expecting a second co

At Harvard Kennedy was on the swimming team—a fact that later p

ably saved his life. Joining the Navy in 1941, he became skipper of a

boat in the Pacific, which was sunk by a Japanese destroyer. Kennedy

given up for lost, but swam to a safe island, towing an injured enlisted

After recovering from a war-aggravated spinal injury, Kennedy en

politics in 1946 and was elected to Congress. In 1952 he ran agains

then Senator from Massachusetts, Henry Cabot Lodge, Jr., and won.

In 1957 Kennedy won the Pulitzer Prize for a book he had written ea

Profiles in Courage, that gave biographical sketches of American po

leaders of earlier days who had displayed courage in standing up for

convictions against odds.

Presidential Election of 1960

(Incomplete returns) Source: Associated Press.

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Democratic—John F. Kennedy, Massachusetts; Lyndon B. Johnson, Texas
 Republican—Richard M. Nixon, California; Henry Cabot Lodge, Massachusetts

State	Electoral vote							National Dem.
	Total	Dem.	Rep.	Plur.	D	R	Unpl.*	
Alabama	523,829	298,764	225,065	73,699 D	5	..	6	29
Alaska	54,110	26,798	27,312	514 R	..	3**	..	9
Arizona	330,438	146,143	184,295	38,152 R	..	4	..	17
Arkansas	367,413	199,647	167,766	31,881 D	8	..	..	27
California	6,205,382	3,121,261	3,084,121	37,140 D	32**	..	..	81
Colorado	723,286	327,001	396,285	69,284 R	..	6	..	21
Connecticut	1,223,656	656,873	566,783	90,090 D	8	..	..	21
Delaware	195,300	99,159	96,141	3,018 D	3	..	..	11
Florida	1,494,073	732,876	761,197	28,321 R	..	10	..	29
Georgia	655,788	407,228	248,560	158,668 D	12	..	..	33
Hawaii	184,909	92,409	92,500	91 R	..	3**	..	9
Idaho	300,191	138,991	161,200	22,209 R	..	4	..	13
Illinois	4,737,733	2,371,839	2,365,894	5,945 D	27	..	..	69
Indiana	2,114,335	939,970	1,174,365	234,395 R	..	13	..	34
Iowa	1,272,189	549,814	722,375	172,561 R	..	10	..	26
Kansas	907,460	357,174	550,286	193,112 R	..	8	..	21
Kentucky	1,114,609	518,341	596,268	77,927 R	..	10	..	31
Louisiana	610,740	390,577	220,163	170,414 D	10	..	..	26
Maine	421,594	181,047	240,547	59,500 R	..	5	..	15
Maryland	1,041,113	559,748	481,365	78,383 D	9	..	..	24
Massachusetts	2,462,680	1,487,180	975,500	511,680 D	16	..	..	41
Michigan	3,299,448	1,682,291	1,617,157	65,134 D	20	..	..	51
Minnesota	1,530,444	777,818	752,626	25,192 D	11	..	..	31
Mississippi	173,531	103,400	70,131	33,269 D	..	..	8	23
Missouri	1,835,386	928,466	906,920	21,546 D	13	..	..	39
Montana	274,537	133,641	140,896	7,255 R	..	4	..	17
Nebraska	587,761	226,028	361,733	135,705 R	..	6	..	16
Nevada	92,167	47,273	44,894	2,379 D	3	..	..	15
New Hampshire	295,706	137,765	157,941	20,176 R	..	4	..	11
New Jersey	2,726,209	1,373,456	1,352,753	20,703 D	16	..	..	41
New Mexico	309,081	155,779	153,302	2,477 D	4	..	..	17
New York	7,258,901	3,831,718	3,427,183	404,535 D	45	..	..	114
North Carolina	1,352,914	709,503	643,411	66,092 D	14	..	..	37
North Dakota	241,618	107,382	134,236	26,854 R	..	4	..	11
Ohio	4,151,051	1,940,803	2,210,248	269,445 R	..	25	..	64
Oklahoma	903,932	369,174	534,758	165,584 R	..	8	..	29
Oregon	747,299	354,890	392,409	37,519 R	..	6	..	17
Pennsylvania	4,897,988	2,514,245	2,383,743	130,502 D	32	..	..	81
Rhode Island	402,008	257,072	144,936	112,136 D	4	..	..	17
South Carolina	382,149	195,487	186,662	8,825 D	8	..	..	21
South Dakota	287,417	120,178	167,239	47,061 R	..	4	..	11
Tennessee	1,025,051	475,989	549,062	73,073 R	..	11	..	33
Texas	2,288,940	1,167,102	1,121,838	45,264 D	24	..	..	61
Utah	371,805	168,016	203,789	35,773 R	..	4	..	13
Mont.	167,540	69,382	98,158	28,776 R	..	3	..	9
Vermont	759,757	359,627	400,130	40,503 R	..	12	..	33
Virginia	1,132,031	557,026	575,005	17,979 R	..	9	..	27
Washington	836,831	440,913	395,918	44,995 D	8	..	..	25
Wisconsin	1,708,621	827,195	881,426	54,231 R	..	12	..	31
Wyoming	140,185	62,552	77,633	15,081 R	..	3	..	15
Total	67,121,136	33,697,011	33,424,125	272,886 D	332	191	14	1,521† 1,331†

Unpledged electors. † 24 National Convention votes allocated to District of Columbia and U. S. territories. National Convention votes allocated to D. C. and U. S. territories. ** In doubt.

PARTY STRENGTH IN 83RD TO 87TH CONGRESSES

	The Senate					The House				
	83rd 1953	84th 1955	85th 1957	86th 1959	87th 1960	83rd 1953	84th 1955	85th 1957	86th 1959	87th 1960
Democratic	47	48	49	65	64	213	232	234	283	259
Republican	48	47	47	35	36	221	203	201	154	178
Unpledged	1	1	0	0	0	1	0	0	0	0

Governors and Senators of the Fifty States

(Source: Associated Press)

Names in parentheses are those of birth. Unless otherwise indicated, the Governor or Senator was born in the state in which he was elected to office.

	Governor	Senior Senator	Junior Senator
Alabama	John Patterson, D (1921)	Lister Hill, D (1894)	John J. Sparkman, D (1899)
Alaska	William A. Egan, D (1914)	E. L. (Bob) Bartlett, D (1904) ¹	Ernest Gruening, D (1887) ²
Arizona	Paul J. Fannin, R (1907) ³	Carl Hayden, D (1877)	Barry Goldwater, R (1909)
Arkansas	Orval Faubus, D (1910)	John L. McClellan, D (1896)	J. W. Fulbright, D (1905) ⁴
California	Edmund G. Brown, D (1905)	Thomas H. Kuchel, R (1910)	Clair Engle, D (1911)
Colorado	Stephen L. R. McNichols, D (1914)	Gordon Allott, R (1907)	John A. Carroll, D (1901)
Connecticut	Abraham A. Ribicoff, D (1910)	Prescott Bush, R (1895) ⁵	Thomas J. Dodd, D (1907)
Delaware	Elbert N. Carvel, D (1910) ⁶	John J. Williams, R (1904)	J. Caleb Boggs, R (1909)
Florida	Farris Bryant, D (1914)	Spessard L. Holland, D (1892)	George A. Smathers, D (1911)
Georgia	Ernest Vandiver, D (1918)	Richard B. Russell, D (1897)	Herman E. Talmadge, D (1919)
Hawaii	William F. Quinn, R (1919) ⁷	Hiram L. Fong, R (1908)	Oren E. Long, D (1889) ⁸
Idaho	Robert E. Smylie, R (1914) ⁹	Henry C. Dworshak, R (1894) ⁹	Frank Church, D (1924)
Illinois	Otto Kerner, D (1908)	Paul H. Douglas, D (1892) ¹⁰	Everett M. Dirksen, R (1896)
Indiana	Matthew E. Welsh, D (1912) ²⁸	Homer E. Capehart, R (1897)	Vance Hartke, D (1919)
Iowa	Norman Erbe, R (1919)	Bourke B. Hickenlooper, R (1896)	Jack Miller, R (1916) ²⁵
Kansas	John Anderson, R (1917)	Andrew F. Schoepel, R (1894)	Frank Carlson, R (1893)
Kentucky	A. B. Chandler, D (1898)	John S. Cooper, R (1901)	Thruston B. Morton, R (1901)
Louisiana	Jimmie Davis, D	Allen J. Ellender, D (1891)	Russell B. Long, D (1918)
Maine	John H. Reed, R (1921)	Margaret C. Smith, R (1897)	Edmund S. Muskie, D (1911)
Maryland	J. Millard Tawes, D (1894)	John M. Butler, R (1897)	J. Glenn Beall, R (1894)
Massachusetts	John A. Volpe, R (1908)	Leverett Saltonstall, R (1892)	John F. Kennedy, D (1917) ¹¹
Michigan	John B. Swainson, D (1925) ²⁹	Pat McNamara, D (1894) ¹⁰	Philip A. Hart, D (1912) ¹²
Minnesota	Elmer L. Andersen, R (1909) ²⁶	Hubert H. Humphrey, D (1911) ¹³	Eugene J. McCarthy, D (1919)
Mississippi	J. P. Coleman, D (1914)	James O. Eastland, D (1904)	John Stennis, D (1910)
Missouri	John M. Dalton, D (1900)	Stuart Symington, D (1901) ¹⁰	Edward W. Long, D (1904)
Montana	Donald R. Nutter, R (1915)	Mike Mansfield, D (1903) ²	Lee Metcalf, D (1911)
Nebraska	Frank B. Morrison, D (1905) ¹⁵	Roman L. Hruska, R (1904)	Carl T. Curtis, R (1905)
Nevada	Grant Sawyer, D (1918) ¹⁶	Alan Bible, D (1909)	Howard W. Cannon, D (1919)
New Hampshire	Wesley Powell, R (1915)	Styles Bridges, R (1898) ¹³	Norris, Cotton R (1900)
New Jersey	Robert B. Meyner, D (1908) ¹²	Clifford P. Case, R (1904)	H. A. Williams, Jr., D (1911)
New Mexico	Edwin L. Mechem, R (1912)	Dennis Chavez, D (1888)	Clinton P. Anderson, D (1891)
New York	Nelson A. Rockefeller, R (1908) ¹⁸	Jacob K. Javits, R (1904)	Kenneth B. Keating, R (1919)
North Carolina	Terry Sanford, D (1917)	Sam J. Ervin, Jr., D (1896)	B. Everett Jordan, D (1896)
North Dakota	William L. Guy, D (1919)	William Langer, R (1886)	Milton R. Young, R (1897) ¹⁴
Ohio	Michael V. DiSalle, D (1908) ²	Frank J. Lausche, D (1895)	Stephen M. Young, D (1893)
Oklahoma	J. Howard Edmonson, D (1925)	Robert S. Kerr, D (1896)	A. S. (Mike) Monroney, D (1919)
Oregon	Mark O. Hatfield, R (1922)	Wayne Morse, D (1900) ²¹	Maurine B. Neuberger, D (1919)
Pennsylvania	David L. Lawrence, D (1889)	Joseph S. Clark, D (1901)	Hugh Scott, R (1900) ²⁰
Rhode Island	John A. Notte, Jr., D (1909)	John O. Pastore, D (1907)	Claiborne de Borda Pell, D (1919)
South Carolina	Ernest F. Hollings, D (1922)	Olin D. Johnston, D (1896)	Strom Thurmond, D (1902)
South Dakota	Archie Gubbrud, R (1910)	Karl E. Mundt, R (1900)	Francis Case, R (1896) ⁸
Tennessee	Buford Ellington, D (1907) ²²	Estes Kefauver, D (1903)	Albert Gore, D (1907)
Texas	Price Daniel, D (1910)	Lyndon B. Johnson, D (1908)	R. W. Yarborough, D (1901)
Utah	George D. Clyde, R (1898)	Wallace F. Bennett, R (1898)	Frank E. Moss, D (1911)
Vermont	F. Ray Keyser, Jr., R (1927)	George D. Aiken, R (1892)	Winston L. Prouty, R (1901)
Virginia	J. Lindsay Almond, Jr., D (1898)	Harry Flood Byrd, D (1887) ²³	A. Willis Robertson, D (1891)
Washington	Albert D. Rosellini, D (1910)	Warren G. Magnuson, D (1905) ⁹	Henry M. Jackson, D (1919)
West Virginia	William W. Barron, D (1911)	Jennings Randolph, D (1902)	Robert C. Byrd, D (1918) ²⁴
Wisconsin	Gaylord A. Nelson, D (1916)	Alexander Wiley, R (1884)	William Proxmire, D (1911)
Wyoming	J. J. (Joe) Hickey, D (1911)	Gale W. McGee, D (1915) ²⁶	Keith Thomson, R (1919) ²⁷

¹ Born in Washington. ² Born in New York. ³ Born in Kentucky. ⁴ Born in Missouri. ⁵ Born in Ohio. ⁶ Born in New Jersey. ⁷ Born in Kansas. ⁸ Born in Iowa. ⁹ Born in Minnesota. ¹⁰ Born in Massachusetts. ¹¹ Born in Pennsylvania. ¹² Born in South Dakota. ¹³ Born in Colorado. ¹⁴ Born in Idaho. ¹⁵ Born in Utah. ¹⁶ Born in Nevada. ¹⁷ Born in Virginia. ¹⁸ Born in Wisconsin. ¹⁹ Born in Mississippi. ²⁰ Born in West Virginia. ²¹ Born in Illinois. ²² Born in Nebraska. ²³ Born in Michigan. ²⁴ Born in Canada. ²⁵ Born in Montana. ²⁶ Born in New Mexico. ²⁷ Born in Alaska.

THE EIGHTY-SEVENTH CONGRESS

(Source: Associated Press)

THE SENATE

The expiration date of each Senator's term is January of the year shown in parentheses. An asterisk (*) indicates that the Senator was re-elected to a full term. The senior Senator is listed first in each case.

ALABAMA

Terrell Hill, D (1963)
John J. Sparkman, D (1967)

ALASKA

L. (Bob) Bartlett, D (1967)
Walter Gruening, D (1963)

ARIZONA

Clayton Hayden, D (1963)
Barry Goldwater, R (1965)

ARKANSAS

John L. McClellan, D (1967)
W. Fulbright, D (1963)

CALIFORNIA

Thomas H. Kuchel, R (1963)
Frank E. Engle, D (1965)

COLORADO

Richard Allott, R (1967)
John A. Carroll, D (1963)

CONNECTICUT

Scott Bush, R (1963)
John F. Dodd, D (1965)

DELAWARE

John J. Williams, R (1965)
Caleb Boggs, R (1967)

FLORIDA

Wesley L. Holland, D (1965)
George A. Smathers, D (1963)

GEORGIA

Richard B. Russell, D (1967)
John E. Talmadge, D (1963)

HAWAII

Sam L. Fong, R (1965)
John E. Long, D (1963)

IDAHO

Harry C. Dworshak, R (1967)
Clayton Church, D (1963)

ILLINOIS

Paul H. Douglas, D (1967)
Charles H. McNamara, D (1963)

INDIANA

Charles E. Capehart, R (1963)
George Hartke, D (1965)

IOWA

Charles Hickenlooper, R (1963)
Charles Miller, R (1967)

KANSAS

Andrew F. Schoeppel, R (1967)
Clayton Carlson, R (1963)

KENTUCKY

*John S. Cooper, R (1967)
Thurston B. Morton, R (1963)

LOUISIANA

*Allen J. Ellender, D (1967)
Russell B. Long, D (1963)

MAINE

*Margaret O. Smith, R (1967)
Edmund S. Muskie, D (1965)

MARYLAND

John M. Butler, R (1963)
*J. Glenn Beall, R (1965)

MASSACHUSETTS

*Leverett Saltonstall, R (1967)
*John F. Kennedy, D (1965)

MICHIGAN

*Pat McNamara, D (1967)
Philip A. Hart, D (1965)

MINNESOTA

*Hubert H. Humphrey, D (1967)
Eugene J. McCarthy, D (1965)

MISSISSIPPI

*James O. Eastland, D (1967)
*John Stennis, D (1965)

MISSOURI

*Stuart Symington, D (1965)
Edward V. Long, D (1963)¹

MONTANA

*Mike Mansfield, D (1965)
Lee Metcalf, D (1967)

NEBRASKA

*Roman L. Hruska, R (1965)
*Carl T. Curtis, R (1967)

NEVADA

Alan Bible, D (1963)
Howard W. Cannon, D (1965)

NEW HAMPSHIRE

*Styles Bridges, R (1967)
Norris Cotton, R (1963)

NEW JERSEY

*Clifford P. Case, R (1967)
H. A. Williams, Jr., D (1965)

NEW MEXICO

*Dennis Chavez, D (1965)
*Clinton P. Anderson, D (1967)

NEW YORK

Jacob K. Javits, R (1963)
Kenneth B. Keating, R (1965)

NORTH CAROLINA

Sam J. Ervin, Jr., D (1963)
*B. Everett Jordan, D (1967)

NORTH DAKOTA

*William Langer, R (1965)
Milton R. Young, R (1963)

OHIO

Frank J. Lausche, D (1963)
Stephen M. Young, D (1965)

OKLAHOMA

*Robert S. Kerr, D (1967)
A. S. Mike Monroney, D (1963)

OREGON

Wayne Morse, D (1963)
Mrs. Maurine B. Neuberger, D (1967)

PENNSYLVANIA

Joseph S. Clark, D (1963)
Hugh Scott, R (1965)

RHODE ISLAND

*John O. Pastore, D (1965)
Clayborne de Borda Pell, D (1967)

SOUTH CAROLINA

*Olin D. Johnston, D (1963)
Strom Thurmond, D (1967)

SOUTH DAKOTA

*Karl E. Mundt, R (1967)
Francis Case, R (1963)

TENNESSEE

*Estes Kefauver, D (1967)
*Albert Gore, D (1965)

TEXAS

*Lyndon B. Johnson, D (1967)
*R. W. Yarborough, D (1965)

UTAH

Wallace F. Bennett, R (1963)
Frank E. Moss, D (1965)

VERMONT

George D. Aiken, R (1963)
Winston L. Prouty, R (1965)

VIRGINIA

*Harry Flood Byrd, D (1965)
*A. Willis Robertson, D (1967)

WASHINGTON

Warren G. Magnuson, D (1963)
*Henry M. Jackson, D (1965)

WEST VIRGINIA

*Jennings Randolph, D (1967)
Robert C. Byrd, D (1965)

WISCONSIN

Alexander Wiley, R (1963)
*William Proxmire, D (1965)

WYOMING

Gale W. McGee, D (1965)
Keith Thomson, R (1967)

Selected in 1960 to fill the unexpired term of the late Thomas C. Hennings, Jr., D.

THE HOUSE OF REPRESENTATIVES

The apportionment based on the Seventeenth Census (1950) distributed the seats in House among the states according to the method of equal proportions. By this method, per cent difference between the average number of Representatives per million people in 2 states is made as small as possible. Also, the per cent difference between the average number of persons per Representative, in any 2 states is made as small as possible. By equalizing the representation of all pairs of states, the method as nearly equal representation as possible to all states in proportion to their population.

The numerals indicate the Congressional Districts of the states, and the designation means At-Large. An asterisk (*) indicates that the Congressman was returned to office in 1960 elections. The terms of all Representatives end January, 1963.

ALABAMA

(9 Representatives)

1. *Frank W. Boykin, D
2. *George M. Grant, D
3. *George W. Andrews, D
4. *Kenneth A. Roberts, D
5. *Albert Rains, D
6. *Armistead I. Selden, Jr., D
7. *Carl Elliott, D
8. *Robert E. Jones, D
9. *George Huddleston, Jr., D

ALASKA

(1 Representative)

At-L. *Ralph J. Rivers, D

ARIZONA

(2 Representatives)

1. *John J. Rhodes, R
2. *Stewart L. Udall, D

ARKANSAS

(6 Representatives)

1. *E. C. Gathings, D
2. *Wilbur D. Mills, D
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REVIEWS OF THE YEAR



THE THEATRE

by LOUIS KRONENBERGER

Drama Critic, Time Magazine

The most important question about any year on Broadway, of course, is how good it was; and the answer this time, I'm afraid, is: not very good. At this time perhaps the most instructive question is how good it tried to be. And the answer, I'm afraid, is that with some notable exceptions, it didn't try at all. For the most part it very plainly and very painstakingly only tried to be commercial, only cared about box office. And so long as there was box office, it didn't even seem to care whether the box office derived from plays, adaptations, theatre pieces, recitals, stunts—anything that could be made to action behind footlights—did quite as well.

As I proceed, the sunlight will break—on occasion quite dazzlingly—through the clouds, and this report will salute a number of evenings that made fun in the theatre, or for excitement, or for genuine rewards. But we must not ignore the clouds, far less dispel them: they constitute the prevailing atmosphere, they overhang a Broadway that has decided, during an era of high costs, that shows must be either hits or flops, and often can only be made to hits by having movie stars heading the cast, or benefit audiences dampen the theatre. The clouds overhang a Broadway that has almost no concern for cultivated tastes, since culture has little to do with cash; a Broadway that almost cheerfully awaits the day when everything it produces must have music as well as words. The clouds overhang a Broadway that values Off-Broadway, if at all, as the proper place for aspiration, for experiment, for art. More and more, what serious or "interesting" work does come to Broadway comes there via England or the Continent; while the occasional talented new American playwright, such as a Paddy Chayefsky, comes there with nice happy endings in his luggage.

As for trends, much the most discernible one last year was a trend away from honest-to-goodness plays, particularly new American ones. Last year's word somewhat resembled a menu with all sorts of hors d'oeuvres and salads and desserts, of dishes with sauces and dishes with spices, but terribly few main courses, *plats du jour*, or old-fashioned meat and potatoes. There were recital-like evenings about Edna St. Vincent Millay or Shaw and Mrs. Campbell, or with Yves Montand or Flanders and Swann, and very nice some of them were. There were evenings, again, of plays that had been made over from novels—not once but twice from Colette's novels—or that had been padded out from TV scripts. There were evenings, like *Take Me Along* and *Christine* and *Greenwillow* and *Saratoga*, of musicals that had run life as novels or plays. There were evenings, a great many evenings, based on somebody's life—President Harding's or Harry Golden's or Mayor

Cardia's, Henry Wirz's or Helen Keller's, the Emperor Caligula's Capt. von Trapp's. However much the spirit of do-it-yourself has permeated life in America generally, it has altogether lost status in the theatre: the you, at most, re-do-it-yourself. And once originality, once the inimitable process of creation, loses caste, once it seems so unnecessary as to be almost eccentric, any hope of a vital, or a revitalized, Broadway becomes a lost cause.

Hence we had a year so basically uncreative that it did not produce, even at a purely popular level, a single straight good comedy. At the same time we had a year that, in strenuously setting commercialism above merit, did fare very well commercially. About a fifth of its productions closed within a few days; a third of them within two weeks.

Human Interest Stories

The season had, however, its interesting, indeed its memorable, occasional. In fact, if we extend the word drama to include melodrama or theatre just something rather tense, and if we now and then treat performance as the equal of playwriting, it was a fairly creditable year for drama. Spang the outset came *The Miracle Worker*, the fierce, turbulent, at length triumphant chronicle of Annie Sullivan's struggles with the child Helen Keller. In stage form, one of the great human-interest stories and great heroic endeavours, it took on new power and reality—not, to be sure, as playwriting but through the magnificent teamwork of Anne Bancroft and young Patty Duke, as teacher and pupil. Early in the season, too, came Mr. Chayefsky's *The Tenth Man*, laid in a shabby synagogue and concerned with exorcising the evil spirit possessed a schizophrenic young girl. At once drawing on life and departing from it, blending surrealism with photography, madness with farce, demonology with Freud, it was vibrant theatre; but in providing a happy ending Mr. Chayefsky seemed schizophrenic himself, half serious playwright, half box-office writer. As the season advanced, *Five Finger Exercise*, an English play by Peter Shaffer about a disrupted family and a young German who comes into it, brought good dialogue and atmosphere to a skillful production. Saul Levitt's *The Andersonville Trial*—concerned with the superintendent of an unspeakable Civil War prison—had some of the vividness that accompanies a lively trial and a tale of horror. Friedrich Duerrenmatt's *Deadly Game*—concerned with a cocky American playfully invited to stand trial for murder in a Swiss chalet, and becoming more and more damnably involved—had less power than Duerrenmatt's *The Visit* but was plainly in the same hand. Along with distinct weaknesses, there were virtues in the plays by famous French writers, Albert Camus' *Caligula* and Jean Giraudoux' *Duel of Angels*. The most impressive new drama, however, was an American one, Lillian Hellman's *Toys in the Attic*. Dealing with a ne'er-do-well who has been kept going by two old-maid sisters who adored him, it told what happened when he acquired a lot of money and his sisters, far from being happy, were distressed that he no longer needed them. Despite flaws, the play had tautness and power.

If straight comedy was absolutely nowhere (only Chayefsky's *Tenth Man* and Gore Vidal's theatre piece about a national convention, *The Best Man*, and any comic merits), gay and carefree evenings yet came from two musicals and two special occasions. *Fiorello!* proved that Mayor La Guardia's personality was as theatrical behind footlights as on a platform, and around him in his razzle-dazzle era *Fiorello!* built a rousing, gusty show. A sleeper among musicals, *Bye Bye Birdie* couldn't have proved more lively; with no great pertness and with anything but a promising theme—an Elvis-Presleyish pioneer and his yowling teen-age admirers—it had enough freshness and bounce to carry all before it. The "special occasions" were special indeed: the two-man show of Flanders and Swann combined British wit with perfect timing and teamwork, and *A Thurber Carnival* was a sort of in-the-flesh mythology—writings and drawings both—of the most delightfully mad of modern humorists.

Broadway even got round twice to reviving the classics, which some years even fails to do once. From England came John Gielgud and Margaret Rutherford to brighten *Much Ado About Nothing*; and, bestrewn with stars, Law's *Heartbreak House*—though fitfully brilliant rather than everywhere bright—was worth having also. With twice as many productions as Broadway itself, Off-Broadway had probably its most noteworthy year. There was, first of all, Jack Gelber's much-discussed theatre piece about dope addicts, *The Connection*; there were plays by the best-known European avant-garde writers, Jean Genet, Eugene Ionesco and Samuel Beckett; and among several works by new American playwrights, Edward Albee's *The Zoo Story* seemed the most promising.

Then, as the season ended, there was the Equity strike. Broadway briefly went dark, and its theatres, by shutting down, perhaps achieved more drama than if they had stayed open. Whatever the cultural loss, there was a sizeable economic one, affecting not only playhouses, but night life in general. Then, like a heart that had menacingly skipped a beat, the theatre again came to life and the show could go on.

SCIENCE

By EDWIN DIAMOND

Science Editor, Newsweek Magazine

The year 1960 was a period of extraordinary achievement in man's understanding and exploration of his own nature and the nature of the world about him. In all sectors, there was progress, vigor, excitement. The last frontiers of the ocean deep and the Antarctic were crossed. A turning point occurred in the uses of atomic energy for propulsion purposes. The struggle against disease was joined with new weapons—and if there were no decisive victories to report against the killer cancer, there were nevertheless signs of promising successes. The mysteries about the nature of matter were being unraveled. A major milestone was reached in man's somewhat paradoxical efforts to devise a robot to replace himself. And, finally, for the first time, mankind was putting together a clear and consistent picture of his material

...gins, the forces that make him what he is and what his eventual physical destiny might be.

Here is a summary of the leading developments in science and medicine in 1960.

Exploration

The physical exploration of the Planet Earth is being completed. The deepest deep of the Marianas Trench in the Pacific, some 38,000 feet below the surface, was reached by an intrepid pair of divers. They made the record dive in the U.S. Navy's Bathyscaphe Trieste. At the same time, the scientist-explorers in Antarctica in effect ceased to be visitors and became permanent colonists of the white continent. A 12-nation scientific treaty, which froze all territorial claims and prohibited new ones, was a diplomatic triumph: Antarctica was taken out of the cold war contest and put on ice. The shape of the Antarctic cities to come on the ice cap was foreshadowed when the U.S. Atomic Energy Commission announced it would build a small nuclear power plant to provide light and heat for the 500 men at the McMurdo Sound air base.

The Atom

The high-energy physicists continued to explore the very heart of matter—the atom's nucleus. In previous years since World War II, the giant atom-smashing machines have helped physicists discover a strange jumble of 30 elementary particles held together by three distinct forces within the atom. But are there others? In 1960, two powerful new machines became available to help find out: the 30 BEV (for billion electron volts) accelerator at Brookhaven National Laboratory, N.Y., and the 25 BEV machine operated by CERN, the 12-nation European atomic energy community in Switzerland.

But the main job in physics fell on the theoreticians, who must sort out and account for these strange particles, now generally acknowledged to be the ultimate constituents of all matter and energy in the universe. When the accounting is made, they expect to grasp the key to The Unified Field Theory, the grand and unifying explanation of what binds the physical universes together. This was the quest that eluded the great Einstein for a quarter of a century. In 1960, physicists talked of two men who might succeed where Einstein failed. The men-to-watch: Werner Heisenberg, 58, Nobel Prize winner of West Germany and Robert Marshak, 43, of the University of Rochester, N.Y.

On the more immediate level, the bright dream of atomic propulsion is at last being realized. The nuclear submarine, of course, is well established; the Polaris-missile-carrying-sub has engineered a quiet revolution in naval strategy (see page 74). Some 46 A-subs of all types are now being built or are authorized. Now at last A-surface ships are coming off the drawing boards in the wake of the splendid accomplishments of the A-sub. The aircraft carrier Enterprise, largest ship ever built, will be able to make 35 knots and sail around the world several times without refueling when she puts to sea in 1963.

The fact that electronic computers calculate faster and better than no longer a threat to the human ego. But when machines translate Russian into English, direct other machines or can beat their human designer checkers, men properly begin to wonder where it will all end.

The translating machine is an IBM creation called Mark I. In its public debut this last year, it translated a Pravda article into Pidgin English. Eventually, Mark I hopes to achieve 1,800 words a minute. The master machine which directs slave machines is called APT (for automatically programmed tools). This master instructs a tool-cutting machine via punch cards that contain its 107 word vocabulary.

The checkers-playing IBM 704 has been instructed in 28 factors of game strategy by its creator, Dr. Arthur Samuel of IBM. As the 704 plays and accumulates "experience," it weights the factors that bring victory. Accumulating and never forgetting, the 704 can beat Samuel. Obviously, of course, its purpose is broader: the checkers game helps man learn how to teach machines to learn. A true learning robot, able to proceed on its own, is much more exciting to the computer people than the relatively stupid assembly-line and translating machines. Correspondingly harder assignments could be given it.

Health

Machines may be teachable, but the American Cancer Society must wonder if people are. The ACS believes that some 85,000 lives could be saved annually if Americans would heed the early warning signals of cancer. Accordingly, it spent \$4 million on a campaign last year to distribute 10 million warnings on the theme "Heed Cancer's Danger Signals." The response, a sample showed, was dismal: fewer than one in six men or women with one of cancer's symptoms saw a doctor.

Early diagnosis is still the main hope for the estimated 500,000 who become cancer victims in 1960. There is still no cure for cancer. However, if found early enough, half of these new cancers can be arrested—and the patient "saved," that is, live for another five years. By then, researchers may know whether viruses cause cancer and whether a vaccine can be devised to protect against it. At Chicago's Hektoen Institute for Medical Research, for example, volunteer tests are being run with a vaccine against leukemia, a now-incurable blood cancer.

Elsewhere, there were more encouraging developments. After two years of testing, the U.S. Public Health Service gave the go-ahead for production of new live-virus polio vaccines. These vaccines, containing live but weakened and harmless polio virus, are considered more effective and longer-lasting than the Salk killed-virus vaccine. Moreover, they are easier to manufacture and administer, since they can be taken orally in pill form or in drops. The new vaccines will probably be available to the U.S. public before the 1961 polio "season" begins.

Another live virus vaccine, this one developed at Harvard and aimed at immunizing children against measles, was to be tested on some 4,000 Nigerian children in the new Republic of Nigeria (where there is an inexplicably high

(infant mortality rate). Following the Nigerian tests, Harvard planned a clinical trial in the New York City area.

And 1960 also marked the year that the long-awaited, much-debated contraceptive, Enovid, was approved for general distribution on doctor's prescription. Twenty pills, taken each month at carefully computed times, was as a "vaccine" against conception.

Discovery

By no means all of the scientific effort was devoted to pushing forward. Science is also concerned with looking into the past—into the swirling mists of time when the planet Earth evolved, into the ill-lit evolutionary path from which man emerged.

In 1960, four new findings threw new illumination on key milestones in this history.

One finding was that of University of California chemist John H. Reynolds, who concluded that the last "manufacturing event" in the formation of our solar system took place 4.9 billion years ago. His conclusion was based on an exquisite combination of spectroscopic and radioactive dating of a meteor sample. It was also consistent with present notions of the birth of our solar system out of swirling gas and dust.

The second finding may help show how life may plausibly have begun on the primitive planet earth. One likely way is from lifeless compounds bubbling up from volcanic pockets on the primordial planet. Florida State University chemist Sidney Fox, following this hypothesis, has already synthesized protein-like materials out of amino acids, using heat as the precipitating agent.

In a related experiment, Prof. Melvin Calvin at the University of California found "ancestral chromosomes"—similar to those chemicals associated with the emergence of life here—in meteor fragments which streaked across the earth from outer space. His conclusion: the same evolutionary processes that unfolded on earth have gone on elsewhere.

On a still higher level, the anthropologists are studying the divergent routes that different primates took along the path to modern man. Last summer, in one of the most rewarding discoveries in the history of anthropology, Dr. Henry D. Solecki of Columbia uncovered three Neanderthal skeletons in the Shanidar cave in the Zagros Mountains of Iraq. Radioactive dating showed they lived 45,000 to 60,000 years ago. This was evidence of the last stand of our poor cousins. As a result of his findings, it is now possible to relate the Shanidar Neanderthals to the other early-man sites at Tabun and Skhul in Mount Carmel in Israel. Thus the gaps between the relatively primitive lives of Neanderthal and the "progressive" culture of early homo sapiens are being filled.

But the final answers man seeks about himself are not likely to be found among the amino acids, the meteors, or the Neanderthal's bones. In the answer may be found in a submicroscopic world of spiraling molecules called the nucleic acids—constituents of every living cell. Two of these nucleic acids, DNA and RNA, are thought to be the architects and modulators of heredity, the mysterious genetic code that controls the form of every

g. At the University of California and at the Rockefeller Institute, biologists last year deciphered bits of this secret code. The goal they seek, in biologist Wendell Stanley's words is: "the Rosetta Stone for the language of life."

It is at this point that pure science and medicine, the past and the present, seem to come together. For the DNA that controls heredity also seems to be involved in cancer research, since cancer is basically a disorder at the cell level. In one sense, the biggest news of 1960 was never formally announced—the steady progress of Nobel prize winners Severo Ochoa, Arthur Kornberg and Edward L. Tatum towards the goal of biological synthesis of DNA. If the DNA code is the Rosetta Stone for life's cryptogram, DNA can be thought of as the "recipe" for life itself.

BOOKS

By LESLIE HANSCOM

Book Critic of Newsweek

This was the year—if one must hunt out a distinguishing mark in a notably senseless period—when the term, "non-book," slipped into the vocabulary of literary journalism to take its useful place beside that other recent coinage, "anti-novel." The event was little marked and less analyzed, but it does have its significance. This newest enrichment of the cant of bookmanship demonstrates that the reviewer is increasingly bound to accent the negative—of mere concern for descriptive accuracy.

The reviewer finds use for these misbegotten nicknames because the books which come before him are misbegotten in nature. They are self-contradictory. Somewhere at the source of today's most representative writing, there is a failure of morale which makes the writer seem to distrust the value of his nature has fitted him to do. The "anti-novel" is the extreme instance of this. An apparition which has arisen in post-war France, the "anti-novel" is deliberately to discredit the novel as a literary form. Doing away with characters, plot and time sequence, making absence of content a theoretical ideal, the novel-killers of France offer an empty husk as the true image of the novel.

Compared to the sinister suggestions of the "anti-novel," the problem of the "non-book" seems almost winsome in its simplicity. Here we are dealing with a mere phenomenon of business. The label, "non-book," was invented to characterize the unholy clutter of merchandising packages which are put in the shape of books but never intended for the book-reading public. In this mongrel category are to be placed all the albums of mug shots of beer-faced babies and pantomime comedians, all the books of doodles and gags by the catchy captions, all the biographies of hambone television performers, published in the hope that their heroes can plug them to sell with the pliant fans in front of the living room screen.

The "anti-novel" and the "non-book" are in arms against the same thing, though they attack from different sides. It is intellect itself which is the enemy. The writer of the *avant-garde* attacks from within by picturing a world which makes no sense and conveying the idea that sense is of no use in trying

understand it. Or he preaches—like the Beat Generation—that, if life is worth living, it isn't the brain that will tell us so; we must heed the wisdom of the blood and the glands. While the artist is dismissing intellect on philosophical grounds, the publisher does so for practical reasons. He believes there isn't enough of it around to concern him as a businessman, and he turns to the manufacture of the "non-book." To the observant outsider, the scene all looks like a scene of self-cannibalism. For if 1960 is the year of the book, can the year of *no* book be far behind?

It is no matter of fantasy to suggest that books may soon become an obsolesced form of communication. This is a topic that often makes for discussion when our men of learning foregather in their seminars to diagnose the state of our culture. The speculation is based on the clearly observable fact that we are growing more and more aural and visual-minded and progressively less responsive to the printed word. A British publisher has even suggested that, before this decade is over, a man of his profession will publish a book by sending one copy to the British Museum and distributing the copies among the various media of live communication, which will then distribute the book to the public. Under this system, the reading of books would become as specialized an activity as the reading of music.

Would a bookless future be as dire an eventuality as some of us believe? Consider it in this way—if the new books published in 1960 had been withheld from the public, would the public have been any the poorer? It would indeed. For all the lamentations with which reviewers in every field traditionally weigh the past season's harvest, it cannot be denied that every publishing year has its rich satisfactions. One biography as resplendent in wit, style and scholarship as this year's *Queen Mary: 1867-1953* by James Pope-Hennessy is enough to declare the case for literacy all by itself.

This was, however, a year markedly lacking in literary excitement. The big best-selling novels of 1960 were holdovers from the previous year. Thanks, in both cases, to lucky tie-ins with public events. James Michener's *Hawaii*—a monster medley of fiction, history and guide-book lore about the new 50th state—strove with only one close rival at the cash register: it was Allen Drury's Washington melodrama, *Advise and Consent*, which came out of the election year excitement and also won this year's Pulitzer Prize. Both novels had leanings toward the commercial "non-book," and one of the big sellers went all the way. This was "The Chapman Report" by John G. Wallace, which turned the Kinsey Report into a gimmick for cheap fiction. One honest-to-goodness bookish book ran well in the best-seller stakes: *The Leopard*. Critics and public alike were charmed by the legitimate air of "The Leopard," a historical novel of Sicily by Giuseppe di Lampedusa.

None of the American giants—unless John O'Hara is reckoned among them—gave us new novels this year. But Britain's two latter-day Prousts—C. P. Snow and Anthony Powell—added a novel each to the two annual cycles in which both are painting mural portraits of their country's elite according to brains or birth. Another notable project in fiction, Lawrence Sanders' *Durrell's Alexandria Quartet*, came to completion this year with *Clea*.

worked some sounds of disenchantment. The Durrell cycle seemed better when it began than when it ended. Another major disappointment was William Faulkner's *Set This House on Fire*, a novel eagerly awaited for nine long years and then found to be turgid and pretentious when it appeared. In compensation, the year produced two outstanding first novelists in Harper Lee, author of *To Kill a Mocking Bird*, and James Leo Herlihy, whose *All Fall Down* was one of the vibrations of true talent.

It was in the field of non-fiction that the "non-book" held almost absolute sway. One of the unlikeliest top best-sellers of all time was *Born Free* by Joy Kilmer, a narrative picture-book about a tame lioness. Somewhere else on the best-seller roster, an adagio dancer displaced the last year's author who told the world how he made \$1,000,000 selling real estate in his spare time. The dancer topped him with *How I Made \$2,000,000 in the Stock Market*. The year ended for 1961: an author with a catchy ending for the following—*How I Made \$3,000,000* . . .

What is really wanted for 1961, however, is the kind of author who will compel the reviewers to speak in straightforward language and sweep all the generated paradoxes out of their Mad Hatter terminology.

CONCERT MUSIC, OPERA, BALLET

By IRVING KOLODIN, Music Critic, Saturday Review

CONCERT MUSIC

The turn of the calendar which converted 1959 into 1960 provided more than a new page of dates on which the future course of musical activity could be set down. It marked the end of a decade in which many of the names and personalities that had dominated concert music in much of the preceding century faded from the scene to be replaced by others. The generations of Toscanini and Furtwaengler, Gieseeking and Sibelius merged into the time of Bernstein and van Karajan, as Stravinsky passed seventy-five and Aaron Copland turned sixty.

For the first time in several decades, the new names becoming familiar to Europeans and Americans began to include representatives of the Slavics from whom, in past times, had come such musical masters as Elman, Paganini, Rubinstein, Chaliapin and Horowitz. Only now the names were becoming known and Oistrakh, Kondrashin and Kogan, whose presence in Carnegie Hall in New York, or Symphony Hall in Boston, or Orchestra Hall in Chicago was visible evidence of the possibility that better relations between East and West might, in fact, come about. At least no translators were required when the Russians played Beethoven or Kondrashin conducted Tchaikovsky in America, and when Claudio Abbado and Isaac Stern took their places on stages in Moscow, Odessa, or Leningrad.

The program of "cultural exchange" which had been developing slowly since the late 'fifties took on broader, wider dimensions in 1960 on both sides of the ideological schism. The year began with the arrival of the Moscow Symphony Orchestra, the first Russian orchestra ever to visit this coun-

ry. As the men filed on to the stage of Carnegie Hall for the first of a series of concerts early in January, they assumed a military posture of greeting their conductor not familiar to our audiences. But closer inspection suggests that flute players look much the same the world around, and as for violinists the Russians invented the breed, didn't they? This response in kind to the previous tours of the U.S.S.R. by the Boston Symphony, the New York Philharmonic and the Philadelphia Orchestras carried the Russians to Eastern cities and included a program in the Madison Square Garden which they were joined by the darling of Moscow and New York, Van Cliburn. Despite a heavy fall of snow (which ended at noon) the huge auditorium held a close to capacity audience for this Sunday matinee concert.

At the end of the year, audiences in twenty cities of America and Canada had the opportunity to hear the great Soviet pianist Sviatoslav Richter. This was an event of uncommon interest for two reasons: Richter had not been allowed to travel to the West previously (his touring was limited to Czechoslovakia, Poland, Bulgaria, Finland, etc.) and he was known at home for non-conformist actions, including participation in the funeral services for late Boris Pasternak. As Richter was traveling to this country in the "Queen Mary," Byron Janis, a one-time protege of Vladimir Horowitz, was receiving applause for proving to the Russians that there are, after all, fine American pianists other than Cliburn.

Mention of the "Queen Mary" suggests that Richter is one of the few musicians of this time who refuse to travel by air. Were this attitude general, the whole trend of an important musical activity in this year, as well as others recently, would have been otherwise. It is only the economic speed of the kind of mass artistic air lift which carried the New York Philharmonic as far west as Hawaii and as far east as Berlin during September that have made possible a singular artistic phenomenon of our times: tours to Europe and the Far East by a dozen American orchestras and tours of the United States by similar organizations from abroad. In the season of 1960 America was visited not only by an orchestra from Moscow, but also by the Israel Philharmonic, the Lamoureux of Paris, the Japanese Broadcasting Symphony, and the Vienna Philharmonic. In several instances the orchestras found it profitable to make a world tour of their journey rather than coming from there to here and back.

To be sure, air travel sometimes results in the possible taking precedence over the desirable: in longer and harder tours than are good for the health of their music-making abilities. But it is also evident that the period has brought a widening appeal of good music for audiences all over the country. This may not be direct cause and result, but it can, at least, be considered a by-product of greater mobility. During the New York Philharmonic's late summer tour it dropped in for visits to Red Rocks Stadium in Denver, the Hollywood Bowl (the first time it hosted such a guest), the Vancouver Festival and Hawaii. The unexpectedly large turnouts in some smaller cities were attributed in considerable part to the curiosity of those who had seen the leader and bought tickets to see "Bernstein's orchestra."

While music was taking a place on the wider stage of world relations, new opportunities for the performance of music were coming into being in all parts of the country, and the rights of some old ones to continuing use were being strongly defended. Hopeful signs of widespread present interest and confidence in future support were evident in New York, where Philharmonic Auditions in the new Lincoln Center for the Performing Arts began to take official form; in Detroit, where Ford Memorial Auditorium was becoming more familiar as the surroundings for Paul Paray and his ensemble; in Los Angeles, where plans for a new Music Center are finally under way; and in Washington, where Congress approved a grant of ground for a National Cultural Center which would, among other functions, house the National Symphony conducted by Howard Mitchell. Among the traditional homes a renewed utility were the Academy of Music in Philadelphia which hired not only a new decor for its hundredth jubilee year, but also a new management; the famous Auditorium Theatre in Chicago, whose restoration to the original conditions created by its architect, Louis Sullivan, promised new life for this community asset; and Carnegie Hall in New York which was saved from demolition by emergency legislation. What might have resulted in a world-wide indictment of "materialistic" America—wanton destruction of its most celebrated hall for music—was resolved, under city ownership and non-profit operation, on a proud note of continuing use for the future. Although the costs of maintaining symphony orchestras were higher than at previous time—wages must be adjusted to meet increased living costs, improving conditions, especially on gruelling tours, must be improved, community services broadened—all the old ones maintain their places and new ones continue to come into being. In many cities, industries lend a hand no longer needed by individual, wealthy sponsors. Houston, Fort Worth and San Antonio are relatively new additions to the list of consequential orchestras; Buffalo, Atlanta, Oklahoma City, Seattle and Utah. On various lower levels, for groups with smaller budgets and more part-time performers, the American Symphony League (supported in part by grants from the Rockefeller Foundation) acts as clearing house for programs of assistance to aspiring orchestras in hundreds of communities where a substantial part of the cultural history of today (and tomorrow) is being played and made.

OPERA—1960

By IRVING KOLODIN, Music Critic, Saturday Review

With the Metropolitan Opera enjoying its longest season in history (twenty-five weeks in New York and seven more on tour), the Chicago Lyric Opera adding its playing time to nearly two months, San Francisco covering the West Coast from Portland to Los Angeles, and the Dallas Civic Opera joining a group of cities presenting outstanding singers, operatic activity in America during 1959-1960 exceeded any since the war in volume and variety. But beneath the surface there were even more fundamental forces at work, kindling the greatest hope in years for a solution to the urgent need of opera companies world-wide: new works of quality to refresh the repertory and take

subject and Blitzstein's personal political beliefs were subjects for angry comments in the press. But if a good opera emerged from it all, it would not be the first time a controversial subject and a nonconformist composer enraged those who would suppress both.

A Tragic Loss

Other aspects of seasonal activity that followed a customary course from September, when the San Francisco season began, to early June, when the Metropolitan tour ended in Toronto, some shining new talent was unveiled, but hardly enough to compensate for the death of Leonard Warren. Jussi Bjoerling, both fine artists, both in their forties. Warren's was vastly shocking, for he had never been known to be in anything but robust health when he collapsed on the stage of the Metropolitan Opera House during the second act of Verdi's "Forza del destino" on March 4, and died within minutes. A stunned audience which had gathered to celebrate the return of Maria Callas to New York left the theatre in silence, the only time in the history of the Metropolitan a performance was suspended. Bjoerling, who was at his home near Stockholm on September 9, had experienced heart trouble previously: but he had sung brilliantly in Vienna only days before, and was looking forward to American engagements when he was stricken. The immediate burden of Warren's work fell to Cornell MacNeill, a younger Canadian baritone with a superb voice but limited experience who had just begun to win wide recognition after a beginning in Menotti's "The Consul" in New York. But there was no replacement in prospect for Bjoerling's voice, which had produced the most beautiful sound of its kind since Caruso and Gigli. Swedish opera enthusiasts congratulated themselves for the emergence to maturity of the Swedish soprano Birgit Nilsson who had a tempestuous success at her Metropolitan debut as Isolde on December 2, 1959. As yet there was no Tristan-like Tristan to her Isolde (the Metropolitan reached a nadir of ineptness on December 28 when the Messrs Ramon Vinyl, Karl Liebl, and Robert da Costa each sang an act of "Tristan" because none were up to the role of it). But, in the Canadian Jon Vickers, opera enthusiasts saw a singer of the vocal and physical stature to become such a singer, given time. He made his so-so debut as Canio (a role not really in his true line) on January 17, and then showed his real merits as a fine Siegmund in Wagner's "Walküre" and as Otello in Beethoven's "Fidelio" on January 28.

World Opera

The Metropolitan took a part in the "cultural exchange" program for the first time when Pavel Livitsian, a celebrity of Moscow's Bolshoi Theatre accepted an invitation to sing Amonasro in Verdi's "Aida" during his visit here on his concert tour. Though he knew the part in Italian, he preferred to perform in Russian. This he did with thorough professional competence and with more stress on acting than some Western performers. In return, the Canadian bass-baritone George London was invited to perform at the Bolshoi, on September 10. His choice was the title role in Mussorgsky's "Boris," which he sang in Russian, the first visitor from this country to do so in the

Soviet Union. He had a warm success, including approval of his fluent Russian—a language he does not speak.

Overseas, operatic activity flourished at a pace unequalled even before the war. Vienna continued its "June weeks" of special performances with national casts in the rebuilt Staatsoper, and Salzburg opened a new, elegant theatre seating about 2,000. It had cost the people of Austria many millions of schillings (more than was allocated to the Foreign Ministry in the post-war period). Rebuilt or restored theatres through Western Germany provided year-round activity on a sizeable scale. New works of interest included Benjamin Britten's operatic treatment of "A Midsummer Night's Dream" and Herman Henze's "Prince of Homburg," which was offered to summer visitors to the Festival of Two Worlds at Spoleto after a German premiere.

There was a customary amount of year-long publicity in the press for one or another of Maria Callas's activities, more off-stage than on. She had no competition for "invalid of the year" honors from Tebaldi, whose suffering from a painful spinal irritation (which caused her to cancel appearances in San Francisco and elsewhere) could be readily alleviated by modern therapy, which she rejects in favor of thermal spas in her native Italy. But the quackery of operatic fanaticism came about in Verona, Italy, during August. In the Aida of the evening, Antoinetta Stella, was hooted from the stage for missing a high note. After an interval, she reappeared to beg forgiveness, physically prostrate herself on the stage. This submission to its will so pleased the audience that Stella finished her evening's work to cheers, no matter how badly she sang.

THE BALLET

By IRVING KOLODIN, Music Critic, Saturday Review

For the first time in our memory two major European ballet companies toured the United States simultaneously in the fall of 1960. For the Royal Ballet (formerly Sadler's Wells) of England, it was the sixth visit since its historic first one of 1949; for the Royal Danish Ballet, it was the second.

This is an index to the nationwide attraction that ballet has exerted since the post-war period, and directs attention to two things: the scope and quality of the companies involved (by comparison with the smaller, less perfect companies that satisfied public demand in the thirties and early forties), and the enormous sums of money Americans were willing to spend on this enthusiasm. In a one-week stand at the Metropolitan Opera House, the Royal Ballet played to empty seats, despite a top price of close to ten dollars per ticket. The Royal Danish Ballet considered their visit worthwhile even though they were relatively handicapped because the English company had prior rights at the Metropolitan in the pre-opera period and there was no acceptable alternative.

Ballet continued to be a prime commodity on the Soviet side of the exchange program, with a visit by the Georgian State Dance Company as a product of a segment of the U.S.S.R. having about the same popularity. Missouri showed some unique attributes of its own, deriving from its individual physical as well as cultural elements. Here the male dancers

, moustached and black-haired, perform the acrobatics more commonly associated with the ballerinas of conventional companies. This includes their own version of dancing *en pointe* (toe dancing), without the assistance of the supporting block, which ballet dancers use in the tip of their dancing shoes. These men wear high boots of very soft leather to protect muscles strengthened by years of training to bear their weight in spins, turns, leaps and some evolutions in which they land in a squatting position on the *pointes* (sometimes on a single foot). It could be said that the acrobatics come to be repetitious in a full-length program (the good-looking females, who wear long, folk-derived dresses covering legs and arms, fulfill a mainly decorative function), but the abundance and skill of the dancing make a rousing impression.

From our side the American Ballet Theatre became the first United States dance company to perform before the critical Russian public. It was generally regretted that ANTA and the State Department had nominated this group, when it showed its current form in a Metropolitan Opera House engagement during April and May. That form was the consequence of a periodic reorganization of this impermanent ensemble, which had left it short of the intended *corps* and balanced strength in soloists that typified its best standard. However, after much hard work during a three months' tour of Europe, it had acquired the physical means to make a good impression on the public, less so on the Russian press. Nora Kaye, who left the company after its New York engagement, was replaced in some roles by Maria Tallchief. An Apache Indian by birth, Miss Tallchief ranks with the best dancers produced in this country, and did much to raise the level of the company's work. As a sidelight on the problems and difficulties of "cultural exchange," it may be noted that the American group was requested not to perform some of its most characteristic works (including "Billy the Kid" and "Fall River Legend," the latter based on the Lizzie Borden case) because they were considered "too violent" for the Russian public.

At home the New York City Ballet (which shares the season at the New York City Center with opera, operetta and drama) added to its reputation as the leading American ensemble with a new, elaborate work by its director, George Balanchine. Commissioned to celebrate the Fourth International Congress of Iranian Art and Archeology in New York during April, it brings together such unlikely elements as the great Persian art of carpet-weaving and the music of Handel in a captivating combination of witty and imaginative dance patterns entitled "The Figure in the Carpet." After tracing the history of this intricate art, it culminates in a grand court entertainment (in the style of Louis XIV) with a series of divertissements in Balanchine's best manner. Mention might also be made of Jerome Robbins' "Ballets USA" which, though not a creation of 1960, continued to carry the banner of characteristic American dance to far places. A collection of items in his singular vein of inventive commentary, sly wit and rejection of emotional involvement, it takes what it needs from the wide repertory of movement (conventional, "modern," or dancing, whatever) to suit Robbins' purpose. As the company is limited in size, the scenery light, the musical requirements not excessive, it is ideally suited for touring—save that dancers of the quality to match Robbins' require-

ents are not disposed to such activity. But when it is put in shape for New York holiday season, or for festival engagements in the summer, "Ball USA" fulfills its claim much more closely than some other far-ranging title.

The "theatre of Martha Graham," as it has come to be called, is as different from all the rest as Robbins' kind of dancing is from Balanchine's or the Georgians' from the Danes. In 1960 Miss Graham gave us one of her infrequent repertory seasons at the Fifty-fourth Street Theatre. This dance choreographer (whose introduction to the world of dance dates to the mid-'twenties) gave her versions of such ladies of legend as Clytemnestra, Jocasta, and Alcestis. There were other works for the excellent group that devoted itself to working with her, including a treatment (minus Miss Graham) of Joan of Arc, entitled "Seraphic Dialogue." But it was clear that a Martha Graham company is another, and lesser, thing than Martha Graham and her company. This is a dilemma that has made itself familiar with the highly individual dancers from Duncan through Wigman and Kreutzberg: individuality is a difficult trait to pass on. The Balanchines and the Robbinses have a happier time of it, for they work objectively *on* others from the beginning.

THE SCREEN

By HOLLIS ALPERT, Film Critic, Saturday Review

During the year bounded in Hollywood by two such major events as the Christianizing of Ben Hur (autumn, 1959) and the crucifixion of Spartacus (autumn, 1960), production decreased, quality ranged from indifferent to poor, and, paradoxically, the audience grew larger and the box-office took in more money. Prosperity for the American film industry was not general. 20th Century Fox, for instance, had no important money makers during the year—but Universal Pictures Corporation made a comeback, after selling off Universal City, its studio, to MCA, the huge talent agency, and the stock of MGM showed noticeable improvement on the exchange. The partial return of the movie audience, up some four million over the previous year's low of 33 million, could undoubtedly be traced to the sameness of programming on TV, as well as even lower quality than usual. By comparison, movies were far greater attraction.

The greatest of these attractions was *Ben Hur*, produced by MGM at a reputed cost of \$15 million, and featuring a truly spectacular chariot race in which Charlton Heston, as Judah Ben Hur, ground his rival Messala (Stephen Boyd) literally into the dust. Well made by director William Wyler, the picture moved slowly at times, had a goodly share of corn, but nevertheless showered with Academy Awards, including those for best picture, best direction, and best male performance (Charlton Heston). There were, of course, those who wondered whether Mr. Heston was truly the actor of the year (Laurence Harvey's performance in *Room at the Top* was notable) and whether the screenplay for Universal's *Pillow Talk* was superior to that of Ingmar Bergman's *Wild Strawberries*, and whether, even, Stanley Kramer's *On the Beach* had less of a message for our time than *Ben Hur*. But the voting members of the Academy of Motion Picture Arts and Sciences were obviously more in a mood to pay homage to pictures that paid off.

Star salaries during the period rose to all time heights. Through share participation arrangements, Doris Day and Cary Grant moved into the tycoon class. Miss Day earned close to a million and a half as her share of the profits of the box-office success, *Pillow Talk*, causing mighty discontent in the breast of her co-star, Rock Hudson, who was on the relatively measly salary of \$10,000 a week. Mr. Hudson has since moved into the ranks of producer-stars. Cary Grant may have set a record when he took seventy-five percent of the profits of a routine service comedy, *Operation Petticoat*. His percentage may eventually amount to three million dollars. Frank Sinatra may have done almost as well with *Ocean's Eleven*, a slow-moving account of a Las Vegas heist.

But the neatest trick of the period was pulled off by Alfred Hitchcock, who bought in a horror job called *Psycho* for less than a million dollars. Through his promotion, and by allowing no one to enter the theater after the start of the picture, he aroused unusual public interest in the picture. He gave audiences at least three good scares for their money and one sequence, the stabbing to death of Janet Leigh in her shower, was portrayed with loving graphophilic detail. This was certainly something television has as yet failed to provide, and Mr. Hitchcock was liberally rewarded.

The drift of film production away from Hollywood became more pronounced during 1959 and 1960; the large Hollywood lots were being used mostly for picayune television half hours—the usual dreary run of situation comedies and westerns. Elia Kazan stubbornly insisted on making movies in New York. His *Wild River*, a story about the development of TVA, was made partially on location in the south, with interiors shot in New York, where several small studios were active. MGM used New York studio space for *Enter the Dragon*. Meanwhile, several pictures of large scope were underway in such far off places as the island of Rhodes (*The Guns of Navarone*), Israel (*Exodus*), and Hong Kong (*The World of Suzie Wong*). The usual practice was to utilize London studios for interior work and the more technical aspects.

Art Houses

The discerning movie-goer was, however, able to find some solid fare among the entries from abroad. The French "New Wave" was on display here during the year. *Black Orpheus* enchanted many with its colorful scenes of Rio carnival. *The Lovers* offered some elegant, but controversial sex. *Yoshima, Mon Amour* was found by many to be the most meaningful and moving film experience of the year. Ingmar Bergman was a solid hit in "art houses," now numbering more than 500 throughout the country. His *The Magician* was the most popular of the Bergman films to date.

England provided the year's best comedies, with *I'm All Right, Jack*, a satire on British labor and management, proving the best of the lot. A new comic star arose in the person of Peter Sellers, who was to be seen in such best, but laugh-provoking films as *The Mouse That Roared* and *The Bed of the Sexes*, an English transplantation of the James Thurber yarn, *Catbird Seat*. Gamesmanship was demonstrated in hilarious fashion by *School for Scoundrels*. And Laurence Harvey was again fine in *Expresso*

ongo, a satire on a rock-and-roll singer and his small-time agent. The usually dependable Alec Guinness was, on the other hand, somewhat of a fit in *Our Man in Havana*.

Smell came in during the year, first accompanying a documentary called *Behind the Great Wall*, and next as an integral part of the experience of watching, hearing, and smelling Mike Todd, Jr.'s *Scent of Mystery*. Smell was voted down by the public, and the synthetic chemicals used in the process gave everyone a much greater appreciation of fresh air.

By October, 1960, the American film had taken a mild upturn with lively, if melodramatic version of *Elmer Gantry*; a well-acted adaptation of *Sons and Lovers* (Jerry Wald produced the film in England, with a large English cast); and Dore Schary's nostalgic, hero-worshipping tale of F.D.I. struggle against polio, *Sunrise at Campobello*. And *Spartacus*, another mammoth spectacle, had started its two-a-day pattern of bookings in the nation's theaters. A story of a gladiator rebellion in ancient Rome, it featured more combat in the arena, a battle between slaves and Roman cohorts, and slightly less than the usual amount of historical inaccuracy. Kirk Douglas, its producer, had won the production race (at a cost of \$12 million) against Brynner, who had planned on making a similar story, *The Gladiators*. In England, however, the race to make the first picture about Oscar Wilde ended in a dead heat. *Oscar Wilde*, with Robert Morley, and *The Trials of Oscar Wilde*, with Peter Finch, opened here simultaneously. Since both told the same story, the Production Code seal was denied to each. But this barrier on subject matter previously considered distasteful had begun to lose some of its effectiveness—due, no doubt, to the pronounced shift away from Hollywood as the world's center of film production. The American movie industry was freer of pressure than at any time in the past; yet, there was no doubt Europeans—forsaking huge screens, and stereophonic sound—were exploring the film medium with greater originality. Our own new wave, with unpleasant little films like *Private Property* and *The Savage Eye*, with haphazardly put-together studies in documentary realism, like *Come Back, Africa* and *Wings and Babies*, was as yet only a wavelet.

TELEVISION

By MERRILL PANITT, Editor, TV Guide

With quiz and payola scandals still in the headlines as the year opened, television's one big job for 1960 was clear. Chairman John C. Doerfer of the Federal Communications Commission put it this way: "Nationwide expression of indignation is such that broadcasting—and TV in particular—must commend certain of its ways if it is to regain some lost respect and confidence."

But the mending couldn't start until the rest of the dirty linen was washed.

In the House, the Harris subcommittee looking into—of all things—legislative oversight, quizzed disc jockeys who had enjoyed a "3-B" (booze, bribes) convention in Miami as guests of big record companies. Oren Harris (D., Ark.), the subcommittee chairman, used a fine hillbilly word to describe most of their testimony—"squirching." Translation: retreating or drawing back from telling the truth.

text up was FCC Chairman Doerfer himself. He had clashed with Harris on the subcommittee over the principle of government interference with free expression in broadcasting. The subcommittee wanted the FCC to ride herd on station-program and public-service policies. Doerfer cited court decisions back up his "hands off" policies. But that wasn't the issue this time. Harris submitted evidence that Doerfer had been a guest on the airplane and on the boat belonging to wealthy broadcaster George B. Storer, who like other radio and television station owners often had dealings with the Commission. President Eisenhower promptly accepted Doerfer's resignation, naming veteran Commission member Frederick W. Ford to replace him.

As a *pièce de résistance* to fatten the newspaper headlines, the Harris committee served up handsome young Dick Clark, Pied Piper of the teenagers. "I think the crime I have committed, if any, is that I've made a lot of money with very little investment," Clark said in his opening statement. He had set up publishing and record companies and reaped a tremendous harvest in royalties on rock-and-roll songs, some of which were played—and popularized—on his television shows. "Obviously you're a fine young man," Chairman Harris told him after two days of testimony. "I don't think you're the inventor of the payola system. I think you're the product." A few days later Harris concluded his hearings.

Now the needles that had been jabbed at television were turned to the constructive work of mending its national image.

Before he resigned, Doerfer had called the heads of the networks together, got them to agree on a minimum of nighttime hours that would be used for educational programs. This made formal the announcements previously made by CBS and NBC on time they would devote to such programming, and brought ABC in as an equal partner.

In a series of statements, the network presidents told the public that in the future the networks would assume complete responsibility for the programs they aired. Previously, responsibility had fallen somewhere between the show producers, the networks and the sponsors.

Congress waded through a mass of bills calling for every possible—and impossible—control of the medium, and finally passed legislation which completely outlawed payola and plugola and authorized the FCC to fine naughty stations \$1,000 a day for failing to comply with its rules.

Frederick Ford, the new FCC chairman, indicated he would be less hesitant than his predecessor in using the Commission's powers to keep stations in line. He condemned unnecessary violence in programming, calling for stations to work more closely with community leaders in planning public-service programs. Then he obtained an appropriation from Congress to set up a "watchdog" division of the FCC to keep track of exactly what was going out over the air.

Many more stations agreed to abide by the National Association of Broadcasters' TV Code of good practice, which made it possible to strengthen the industry itself and to set up more adequate facilities for the industry to police itself.

All these steps helped, but television's public image is not formed by laws, rules, statements and self-policing. It is formed by what appears on the screen for all Americans to see. For the selective, thinking viewers—those who are informed as well as entertained by the medium—television's 1960 image was the most exciting, the most rewarding ever.

News Events, Top TV Shows

Techniques of political campaigning which had been used since the founding of the Republic went by the wayside when, for the first time, voters saw and heard the two major-party candidates for President in face-to-face discussions of the campaign issues. The series of "Great Debates" between Vice President Nixon and Senator Kennedy attracted audiences up to 78,000,000 for each telecast and were termed by Roscoe Drummond "one of the best additions to the democratic process since the secret ballot." Ironically, the networks had to fight for the right to contribute time for the debates, which were technically illegal because of a provision of the Communications Act. Congress finally suspended the provision—temporarily—after the network led by CBS, aroused public enthusiasm for the debate series.

For the first time the Winter Olympics were televised live (from Squaw Valley, Cal.) and the Summer Olympics were seen in the United States a few hours after the events by means of tape flown from Rome.

When the abortive summit conference in Paris reached a climax with Soviet Premier Khrushchev's dramatic press conference, viewers had to wait only a few hours to witness every gesture, every threat, every insult. They also saw the crowds greet President Eisenhower in South America and in the Far East, and the mob in Tokyo attack press secretary James C. Hagerty.

Americans watched free-world, neutral and Communist leaders arrive at the United Nations General Assembly meeting in September, saw the speeches at the UN and were on hand whenever Khrushchev held an impromptu balcony press conference or Castro changed hotels.

Political conventions had been covered before, but never as incisively as David Brinkley and Chet Huntley did in their jobs as anchor men for NBC, which ran away with ratings honors for the conventions.

Besides live, tape and film coverage of these and other national and international events, the networks—and many individual stations—offered scores of documentaries, commentaries and background roundups on news developments. In all, television's ability in the news and special-events field had never been shown to better advantage than it was in the news-filled year of 1960.

Most television time, however, is devoted to entertainment, as it must be to meet the fundamental requirement of making a station or a network a paying business. In this area the medium continued to suffer from its preoccupation with ratings and from the impossibility of devising bright, fresh material to fill every hour of the long television day.

The statistics of the 1959-60 season indicate that viewers were more likely to favor hour-long Westerns, adventure and private-eye shows than the half-hour efforts. The past performance records also showed that half-hour series

comedies had a better chance to succeed than any other type of show. As a result, the 1960-61 schedule listed 15 new half-hour situation comedies, 10 new Westerns (two of them hour-long), eight new adventure series (five of them hour-long) and three new hour-long private-eye shows.

Based on the ratings, "The Untouchables," fictional adventures of crime-fighter Eliot Ness, was the outstanding new film series of the year. Well-produced and given a ring of authenticity by Walter Winchell's documentary-type narration, "The Untouchables" dwelt on gangsters of the 1930's, especially their propensity for murder—the gorier the better.

The brightest series dialog came every so often in "Hennessey," which featured Jackie Cooper as a Navy doctor. This situation comedy succeeded especially because it eschewed slapstick, used comedy as a relief from a plot that usually had "heart."

Writer Rod Serling seemed more surprised than anyone else when his series of well-written, supernatural, science-fiction and off-beat tales in "The Twilight Zone" was renewed for another season.

Back in the stone age of television film, the standard situation-comedy was about a bumbling father who was outsmarted each week by his wife, son, daughter or all three. The '60-'61 lineup proved that the writers had progressed very little from "The Stu Erwin Show" and "The Life of Ozzie." There were bumbling fathers, bumbling aunts and bumbling friends. A few—"My Three Sons," "Angel," and "The Law and Mr. Jones"—were different, and they showed early signs of success.

Original Plays Scarce

As always, television's best entertainment was to be found in specials that had been written, planned and rehearsed in something over a week or two. Fred Astaire, Danny Kaye, Debbie Reynolds, Art Carney, Bing Crosby and many more stars who deserve the appellation, turned out first-rate comedy and musical shows. "Hallmark Hall of Fame" and "Du Pont Show of the Month" presented drama that was always satisfactory, sometimes excellent. There was a lack of dramas written especially for television, possibly because the medium's best playwrights had found greener—and freer—fields on Broadway and in the movies. Sooner or later their movies probably would show up in television adaptations presented by David Susskind. Susskind, incidentally, packaged television specials like a department-store Christmas—gaudy on the outside, merchandise of varying quality on the inside. He also produced a noisy thing called "The Witness," in which various worthy characters were portrayed in fictionalized committee inquisitions. This he did in addition to telling Premier Khrushchev—on the air—that he was "baying at the moon," and issuing regular statements about how bad television was.

At year's end a good start had been made at reconstructing television's image as a public-service medium. But if the networks had indeed assumed responsibility for everything they put on the air, they were not yet succeeding in bolstering the medium's image as a first-rate entertainment medium. That, it appeared, would be the job for 1961.

SPACE AGE NEWS

By
WILLY LEY

On October 4, 1960, at the end of the third year of active space experimentation, the United States placed its 26th artificial satellite into orbit. At the end of the first year of space experimentation, which had started with Sputnik I, the question which of the two rival nations was ahead could not be answered with the simple if unhappy statement that the Russians were at least two years ahead of us. At the end of the second year of space experimentation, that gap had actually widened.

Now, at the end of the third year, things are not so simple any more. The U.S. has placed more than four times as many satellites into orbit as the U.S.S.R. The U.S. has two planetary probes in orbit around the sun; the U.S.S.R. has one. But the U.S.S.R. has had an impact on the moon and we have not. The guidance systems on both sides seem to be equally good. Our instrumentation seems to be superior to that of the Russians. But the Russians still can shoot far heavier payloads, and therefore they do not have to worry about ultrarefined and ultralight instrumentation systems.

Because of their ability to shoot far heavier payloads, a few spectacular firsts will still go to the Russians for at least one and probably two years. They will be the first to have a man in orbit, possibly a capsule with a small crew instead of just a single astronaut. They probably will send a manned capsule around the moon without landing, before we are ready to embark on such an experiment. And they will land an instrument load on the moon, a so-called "soft landing," ahead of us.

None of these "space spectacles," as some Americans have dubbed them, are due to any "secrets," such as better fuels, better metals or, in general, tricks of the trade we do not know. They are due simply to the larger size of the Russian rockets. Our Atlas has a take-off thrust of 360,000 pounds; this is enough to throw a most destructive hydrogen warhead over a distance of 7,000 miles. But the Russian T-3 rocket has a take-off thrust of about 750,000 pounds, and a new rocket tested by the Russians is estimated to have a take-off thrust of considerably more than one million pounds.

Are We Catching Up?

When it comes to scientific research, the lesser take-off thrust is not so important; in fact we have fired many of our satellites with Intermediate Range rockets (IRBM) instead of with Intercontinental rockets (ICBM). Instrument loads can be adjusted to the available thrust; astronauts cannot be redesigned for lesser weight and bulk. And the aim is still the manned artificial satellite, the space station, which would be a better "watchdog" for activities on the ground than even a dozen unmanned specialized satellites. Also the space station could provide superb guidance for missiles fired from one point on the ground against another point.

The reasons why the Russians developed larger rocket motors ahead of

only be guessed. One factor which certainly played a role is that the Russian military missile program and their space exploration program seem to have been tied together from the very outset, while we lost time by the needless effort of separating the two. But there is one additional possibility. During World War II, two German researchers, Dr. Eugen Sänger and Dr. Peter Bredt (they married later) developed a plan for a rocket-propelled, around-the-world bombing plane. This plane needed a take-off sled, to be accelerated by very heavy rocket motors. No actual work was done by the Sänger-Bredt team, and their comprehensive report was not ready until near the end of the war. But it is known that a copy of the report was captured by the Russians and came to Stalin's attention. Stalin ordered a full translation of the report, was, in the words of an eyewitness, very much impressed with it. It is probable that Stalin at that time gave the order to go ahead with the scheme (he also gave the order to capture Dr. Sänger, an order which could not be carried out) and that the Russians originally developed their superheavy rocket motors for the take-off sled, using them later to propel their ballistic missiles.

At any event their heavy rockets will enable them to establish a few more "stages" before our super booster, the Saturn (take-off thrust 1.5 million pounds), is operational. But the Saturn, when operational, will be capable of launching 20,000 pounds into a 300-mile orbit.

Unmanned Satellites: Two Types

As for artificial (unmanned) satellites, it is now necessary to realize that there are basically two types. One is the research satellite, which may be compared to the microscope; a microscope does not "do" anything directly, but it is a wonderful device for learning facts. The other type of satellites may be called "utility satellites" and might be compared to a household device, a vacuum cleaner. You don't learn much from it, but it does very useful work.

As for the satellites to come during 1961, the majority will still be what the satellites up to now have been: namely, research instruments. As happens in many sciences when they are new, the first discoveries are more or less accidental but they can be followed up systematically, once they have been made. The major new discovery in the field of space research is the Van Allen layer, the double belt of radiation around the earth. It will now be necessary to observe the Van Allen layer carefully over a long period of time. The measurements, mostly from *Pioneer IV* and *Pioneer V*, indicate that the Van Allen layer undergoes fluctuations both in dimensions (especially thickness) and in intensity. For the safety of future space travellers, these fluctuations must be well charted, which can be done best by satellites in very elongated orbits, with their perigee around 200 miles and their apogee some 100,000 miles out. (The orbital period of such a satellite would be 1 day and 18 hours.) The elongated orbit has the purpose of going through the belt during every circuit. Some additional research satellites might be placed in near circular orbits in the Van Allen layer itself at varying distances.

Rockets Restarted in Space

So far, long, elliptical orbits had to be shot directly from the ground, which is very difficult. But the development of rockets (like the *Able-Star*) which can be restarted in space is likely to change the picture. From now on a satellite may be placed in an orbit near the earth first, and after it is settled in its orbit, that orbit may be changed to suit the requirements.

Here are a few figures:

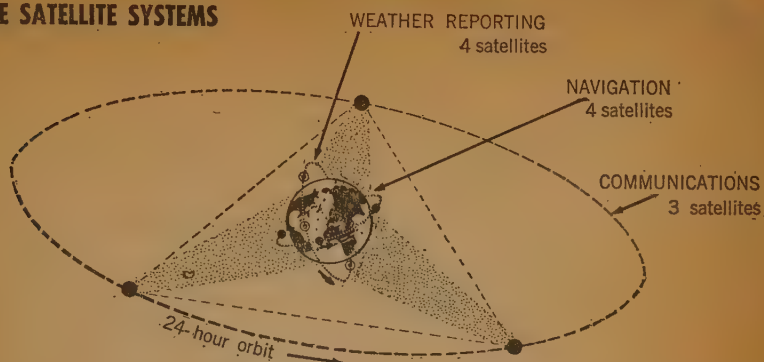
Let us take the case of an artificial satellite in a nearly circular orbit 170 miles above sea level. This satellite will move at the rate of 4.971 miles per second and will need one hour and 27 minutes to go around the earth once. Now let us assume that a rocket charge adds $\frac{1}{8}$ of a mile per second to the velocity. The velocity now is 5.096 miles per second and the orbit becomes elliptical. The point farthest away from the earth will be 598 miles above sea level. At this point, the apogee, the satellite will travel at the rate of 4.397 miles per second. The nearest point, the perigee, will stay at the former altitude (170 miles) and when the satellite goes through its perigee it will move at 5.096 miles per second. Time required for one complete circuit from perigee to perigee will be one hour 34½ minutes.

Now we add another $\frac{1}{8}$ of a mile per second to the velocity as the satellite goes through its perigee. The ellipse now lengthens some more. The apogee will be 1,150 miles away and at apogee the velocity will be 4.046 miles per second. Adding another $\frac{1}{8}$ of a mile per second at the next perigee passage (one hour 43.4 minutes after the previous perigee passage), the ellipse becomes long enough so that the new apogee will be 1,745 miles from sea level. The apogee velocity is down to 3.7 miles per second and the orbital period has grown to one hour 54 minutes.

Adding still another $\frac{1}{8}$ mile per second at the following perigee passage we get an orbit with an apogee at a distance of 2,453 miles, with an orbital period of two hours 6.5 minutes but with its perigee still at 170 miles. Since we have added $\frac{1}{8}$ of a mile per second four times, the total addition now amounts to $\frac{1}{2}$ mile per second. If we added another $\frac{1}{2}$ mile per second (or one mile per second to the original velocity), the apogee of the new orbit would be 7,000 miles away and the apogee velocity would be down to 2.143 miles per second. The reason why these apogee velocities are so low is that the satellite is climbing "out" against the earth's gravity from the perigee and loses velocity while doing so. Now we add one more mile per second and find that our apogee is 300,740 miles out, beyond the orbit of our natural moon! (This is almost precisely the orbit actually travelled by the Russian rocket which took pictures of the far side of the moon.)

The main message of the figures just quoted is this: it took 4.971 miles per second to establish a satellite at a distance of 170 miles. And it took two additional miles per second to make it go beyond the moon! In space activities, as elsewhere, the first step is the most difficult, the longest and the most expensive.

THREE SATELLITE SYSTEMS



PICTOGRAPH CORPORATION

Returning to the distinction between research and utility satellites, it can be stated that the elongated orbits just discussed will be traveled mainly by research satellites, while the utility satellites will travel circular or nearly circular orbits. One exception may be a monitoring satellite, which, travelling an elongated orbit, will keep track of the fluctuations in the Van Allen belt.

As for the utility satellites in circular orbits, one can foresee several purposes, (1) navigational aids, (2) weather-reporting satellites and (3) communication satellites. Prototypes of each of these types have already shown that it will work. The *Transit* type is the forerunner of the navigational aids; it has demonstrated the feasibility of cloud-cover reporting from space; while *Echo* and *Courier* are experiments with communication satellites. Of these *Echo* is a so-called "passive repeater" (it just produces a radio echo), while *Courier* is an "active repeater"; i.e., it repeats the signal thrown at it with the power of its own. Naturally this "active" echo is more powerful than the "passive" echo, increasing its usefulness.

By the time—say by 1964 or 1965—we will probably have three practical satellite systems in orbit, one (consisting of four satellites in the same orbit) as to navigation, one (consisting of three or four satellites in the same orbit) for weather observation and one (three satellites in the same orbit) for intercontinental and transcontinental communication.

If any reader does not have a copy of the 1960 edition of the *INFORMATION PLEASE ALMANAC*—which included the following exclusive articles: Political Side, 1960 presidential election; Ages of Man; and Relearning Science—he can purchase a copy by sending a money order for \$1.25 to *INFORMATION PLEASE ALMANAC*, 444 Madison Avenue, New York 22, New York.

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SPACE AGE NEWS CHRONOLOGY

By

WILLY LEY

HIGH VERTICAL SHOTS AND LUNAR PROBES

Date	Place of firing	Purpose and results:
Feb. 24, 1949	White Sands Proving Ground, New Mexico	Two-stage rocket, V-2 plus WAC Corporal, first large two-stage rocket, test separation in mid-flight. First successful, peak altitude of top stage 250 miles.
Winter, 1956-57	Cape Canaveral	Runaway X-17 three-stage solid fuel nose cone test rocket. Lost by trajectory error, calculation indicates peak altitude near 1,000 miles.
Sept.-Oct., 1957	Above Eniwetok, Pacific Ocean	Project Farside; Four-stage solid fuel rockets carried to over 80,000 ft. with plastic balloon. Six attempts, generally unsuccessful. Highest shot estimated at 3,000 miles (transmission failed at 2,700 miles while rocket was still climbing).
Aug.-Sept. 1958	Above South Atlantic	Project Argus, using modified X-17 rockets. Three shots, exploding with nuclear bombs 300 miles above surface level.
Aug. 27, 1958	Kyzyl Kum Desert	Russian research rocket, carrying 3,726.45 lbs. to 279.6 miles. Two dogs in payload, recovered alive.
Oct. 11, 1958	Cape Canaveral	Pioneer I, lunar probe. Reached maximum altitude of 71,300 miles. Did not enter atmosphere over South Pacific 43 hours and 17.5 min. after take-off.
Nov. 8, 1958	Cape Canaveral	Pioneer II, lunar probe. Third stage failed to ignite, re-entered 42.4 minutes after take-off. Peak altitude not announced; must have been over 1,000 miles.
Dec. 6, 1958	Cape Canaveral	Pioneer III, lunar probe. Reached maximum altitude of 66,654 miles. Did not cover outer Van Allen radiation zone. Burn-up over French Equatorial Africa 38 hours and 6 minutes after take-off.

Date	Place of firing	Purpose and results:
2, 1959	Kyzyl Kum Desert	Russian lunar probe Metchtá ("Day-dream") missed moon by 4,600 miles. Radio transmission stopped soon after passing moon, suggesting that rocket was fired for impact. Weight 3,245 lbs. Now in orbit around sun, orbital period ca. 15 months.
March 3, 1959	Cape Canaveral	Pioneer IV, lunar probe, passed moon on March 4 at a distance of 37,300 miles; now in orbit around sun similar to Metchtá's. Weight 13.4 lbs.
March 6 (?), 1959	Woomera, Australia	British Black Knight rocket carried nose cone to 300 miles.
March 2, 1959	Kyzyl Kum Desert	Single-stage liquid fuel Russian rocket carried 4,400 lbs. of payload to above 200 miles. In payload two dogs and a young hare. Recovered alive and healthy.
March 7, 1959	Wallops Island (Virginia)	Five-stage Javelin ¹ rocket carried 45 lbs. of instruments to 600 miles; soon after, a Strongarm rocket carried 25 lbs. to 470 miles.
March 12, 1959	Kyzyl Kum Desert	Russian lunar probe, weighing 860 lbs. Impact on moon in the area of <i>Mare serenitatis</i> 35 hours after take-off. Load not heavy enough to produce crater visible from earth.
March 10, 1959	Wallops Island	Five-stage Strongarm rocket carried instrument payload to 1,050 miles.
March 10, 1959	Woomera, Australia	Black Knight reached 450 miles.
March 11, 1960	Cape Canaveral	Pioneer V space probe fired into orbit around sun between orbits of earth and of Venus. Orbital period 311 days, total weight 94.8 lbs. Radio transmission over record distance of more than 20 million miles.
March 19, 1960	Point Arguello, Calif.	Four-stage solid fuel NASA rocket fired into inner Van Allen belt. Peak altitude reached 1,200 miles. 83-lb. instrument capsule recovered 3 hours later by U.S.S. Rowan.
March 21, 1960	Cape Canaveral	Four-stage solid-fuel Blue Scout rocket, carrying 32.8 lbs. of instrumentation. Radio failed, estimated peak altitude 16,600 miles. Re-entered 7 hours after take-off.

¹Javelin, Strongarm and other rockets, such as Jason (Argo E-5) and Journeyman (Argo D-8), are test vehicles made up, when needed, from existing missiles. Strongarm's first stage is an Honest John, the second and third stages are Nike Ajax boosters, the fourth stage a Recruit and the fifth a scaled down Sergeant. Another version of the T-55 Jato unit as the top stage. Journeyman's first stage consists of a Sergeant and two Recruits clustered together; the second and third stages are Lance rockets, and the fourth stage an Altair rocket.

ARTIFICIAL SATELLITES

Name	Firing Date	First perigee (miles)	First apogee (miles)	Orbital period (minutes)	Satellite weight (pounds)	Total weight in orbit (pounds)	Lifetime terminated
Sputnik I	Oct. 4, 1957	142	588	96.17	183.6	ca. 8000	Jan. 4, 1958
Sputnik II	Nov. 3, 1957	140	1038	103.7	1120	ca. 9000	Apr. 14, 1958
Explorer I	Jan. 31, 1958	224	1573	114.8	18.13	30.8	Another 5 years
Vanguard I	Mar. 17, 1958	409	2453	134.3	3.25	53.25	1,000 years
Explorer III	Mar. 26, 1958	121	1746	115.9	18.56	31	June 27, 1958
Sputnik III	May 15, 1958	135	1167	106	2925	8000+	April 6, 1960
Explorer IV	July 26, 1958	163	1380	110.27	25.8	38.4	Oct. 23, 1959
Score (Atlas)	Dec. 18, 1958	110	920	101.46	160	8750	Jan. 21, 1959
Vanguard II	Feb. 17, 1959	347	2064	125.85	20.74	50.74	Another 40 years
Discoverer I	Feb. 28, 1959	99	605	95.9	245	1300	March 5, 1959
Discoverer II	April 13, 1959	142	220	90.5	245	1610	April 26, 1959
Explorer VI	Aug. 7, 1959	157	26,400	12 h. 46 m.	142	....	Est. late 1961
Discoverer V	Aug. 13, 1959	150	450	ca. 95	450	1700	Sept. 28, 1959
Discoverer VI	Aug. 19, 1959	138	537	ca. 100	450	1700	Oct. 20, 1959
Vanguard III	Sept. 18, 1959	319	2329	135	50	100	Another 40 years
Cosmic Rocket III	Oct. 4, 1959	24,840	291,870	15 d.	613	3416	May 19, 1960
Explorer VII	Oct. 13, 1959	346	664	101.25	91.5	....	Another 20 years
Discoverer VII	Nov. 7, 1959	100	515	94.55	300	1700	Nov. 26, 1959
Discoverer VIII	Nov. 20, 1959	117	1040	103	300	1700	Est. March, 1960
Tiros I	April 1, 1960	429	468	99.1	270	ca. 320	About 100 years
Transit I B	April 13, 1960	239	472	95.9	265	ca. 1500	Est. Sept. 1961
Discoverer XI	April 15, 1960	110	345	92.3	300	1700	April 26, 1960
Sputnik IV	May 15, 1960	189	222	91.1	9988	??	July 17, 1960
Midas II	May 24, 1960	300	318	94	3300	ca. 5000	Another 5 years
Transit II A	June 22, 1960	389	658	102	265	1500	Another 50 years
Greb	June 22, 1960	382	658	102	42	Same	Same
Echo I	Aug. 12, 1960	1018	1160	121.6	137.4	....	1,000 years
Discoverer XIII	Aug. 10, 1960	266	436	96	300	1700	Aug. 11, 1960
Discovery XIV	Aug. 18, 1960	116	502	94.5	300	1700	Aug. 19, 1960
Sputnik V	Aug. 19, 1960	198.8	198.8	90.7	10,120	....	Aug. 20, 1960
Discoverer XV	Sept. 13, 1960	130	472	94.24	1700	300	Sept. 14, 1960
Courier I	Oct. 4, 1960	500	745	ca. 104	501	....	1,000 years

NOTES:

Sputnik I.
Sputnik II.
Explorer I.
Vanguard I.

Explorer III.
Sputnik III.
Explorer IV.
Score
Vanguard II.
Discoverer I.
Discoverer II.
Explorer VI.

Discoverer V and VI.
Vanguard III.
Cosmic Rocket III.
Explorer VII.
Discoverer VII.
VIII and XI.
Tiros I.

Transit IB.
Sputnik IV.

Midas II.
Transit IIA.
Greb

Echo I.

Discoverer XIII.
Discoverer XIV.
Sputnik V.

Discoverer XV.
Courier I.

Top stage of rocket re-entered and burned up during the first week of December 1957. Carried dog Lalka ("barker"), killed after nearly 100 hours in orbit.

Oldest satellite still in orbit.

Enabled geophysicists to determine precise shape of earth. Its solar batteries are still working.

First satellite known to have been slightly displaced by the sun's radiation pressure.

Contributed to knowledge of radiation in space.

Surprisingly short lifetime for its heavy weight.

Most successful of the Explorer satellites, contributed to evaluation of Project Argus.

Whole Atlas missile without booster in orbit. First broadcast from space.

Called the "cloud cover satellite," would have yielded better results if it had not tumbled.

First satellite in polar orbit. Tumbled, lasted only five days.

Ejected capsule to be recovered, but ejection took place over Spitsbergen instead of over Hawaii.

The so-called paddlewheel satellite. Radio ceased to broadcast (for unknown reasons) Oct. 6, 1959. Its carrier rocket was never observed with certainty, probably still in orbit.

Both ejected their capsules back into the atmosphere, but in both cases transmitters in capsules failed to work, so recovery was impossible. The carrier rocket of one is still in orbit.

The so-called leechcream cone, last of the Vanguard shots. Radio out Feb. 14, 1960.

Orbital ellipse long enough to loop around the moon, first pictures of moon's "backside," into earth on its 15th revolution.

Satellite still transmitting. Its carrier rocket is still in orbit too.

Recovery attempts failed in all cases.

The spectacularly successful cloud cover satellite. Active life was 78 days during which a total of 22,952 pictures were transmitted to ground stations. Both the satellite and the carrier rocket are in orbit.

First navigational satellite, 3 objects in orbit, satellite, rocket body and a metal ring.

The figures in the table refer to the rocket carrier. The cabin section was supposed to be slowed down by retro rockets to re-enter the atmosphere. The radio command for this was sent May 19, but the cabin had the wrong position so that the retro rockets accelerated it, re-entering into a new orbit with the same perigee (189 miles) but a new apogee of 412 miles and an orbital period of 94.3 minutes. Satellite broke up, so there are now eight pieces in orbit, likely to re-enter late in 1961.

The infrared detector satellite, details are classified. Carrier in orbit too.

Navigational test satellite.

Small radiation satellite, fired as "piggy-back" of Transit IIA. First instance of two satellites fired by one rocket.

The 100-foot inflated aluminized balloon used for "bouncing" telephone calls, wireless pictures and so forth. It and its carrier rocket will have an indefinite life time, though the useful time of the balloon is estimated to be one year at most.

Capsule recovered, fished from Pacific Ocean. Recovery on day after firing.

Capsule recovered, caught in mid-air. Recovery on day after firing.

Soviet satellite carrying two dogs and a number of smaller animals, as well as microscopes, plants and plants. Recovered safely on day after firing. First recovery of living beings in orbit, presumably by winged re-entry.

Capsule re-entered and was seen floating in recovery area but sank before it could be recovered.

Communications test satellite.

United States Population by State, 1790 to 1960

Source: U. S. Bureau of the Census.

State	Population				1960*			
	1790	1900	1950	1960	% increase 1950-60	Land area, sq. mi.	Pop. per sq. mi.	Rank
Alabama		1,828,697	3,061,743	3,245,806	06.0	51,078	63.5	19
Alaska		63,592	128,643	224,094	74.2	571,065	.4	50
Arizona		122,931	749,587	1,288,433	71.9	113,575	11.3	35
Arkansas		1,311,564	1,909,511	1,771,343	07.2 M	52,675	33.6	31
California		1,485,053	10,586,223	15,506,974	46.5	156,740	98.9	2
Colorado		539,700	1,325,089	1,743,516	31.6	103,922	16.8	33
Connecticut	237,946	908,420	2,007,280	2,516,799	25.4	4,899	513.7	25
Delaware	59,096	184,735	318,085	442,891	39.2	1,978	223.9	46
District of Columbia		278,718	802,178	745,603	07.1 M	61	12,223.0	...
Florida		528,542	2,771,305	4,886,016	76.3	54,262	90.0	10
Georgia	82,548	2,216,331	3,444,578	3,910,817	13.5	58,483	66.9	15
Hawaii		154,001	499,794	620,346	24.1	6,407	96.8	44
Idaho		161,772	588,637	662,856	12.6	82,769	8.0	42
Illinois		4,821,550	8,712,176	10,005,955	14.9	55,935	178.9	4
Indiana		2,516,462	3,934,224	4,633,395	17.8	36,205	128.0	11
Iowa		2,231,853	2,621,073	2,742,753	04.6	56,045	48.9	24
Kansas		1,470,495	1,905,299	2,177,822	14.3	82,108	26.5	28
Kentucky	73,677	2,147,174	2,944,806	3,015,967	02.4	39,864	75.7	22
Louisiana		1,381,625	2,683,516	3,233,859	20.5	45,162	71.6	20
Maine	96,540	694,466	913,774	961,967	05.3	31,040	31.0	36
Maryland	319,728	1,188,044	2,343,001	3,074,860	31.2	9,881	311.2	21
Massachusetts	378,787	2,805,346	4,690,514	5,115,295	09.1	7,867	650.2	9
Michigan		2,420,982	6,371,766	7,778,220	22.1	57,022	136.4	7
Minnesota		1,751,394	2,982,483	3,391,348	13.7	80,009	42.4	18
Mississippi		1,551,270	2,178,914	2,165,064	00.6 M	47,248	45.8	29
Missouri		3,106,665	3,954,653	4,292,982	08.6	69,226	62.0	13
Montana		243,329	591,024	669,547	13.3	145,878	4.6	41
Nebraska		1,066,300	1,325,510	1,404,556	06.0	76,663	18.3	34
Nevada		42,335	160,083	282,137	76.2	109,789	2.7	49
New Hampshire	141,885	411,588	533,242	600,782	12.7	9,017	66.6	45
New Jersey	184,139	1,883,669	4,835,329	6,039,594	24.9	7,522	802.9	8
New Mexico		195,310	681,187	943,981	38.6	121,511	7.8	37
New York	340,120	7,268,894	14,830,192	16,655,836	12.3	47,944	347.4	1
North Carolina	393,751	1,893,810	4,061,929	4,531,834	11.6	49,097	92.3	12
North Dakota		319,146	619,636	627,209	01.2	70,057	9.0	43
Ohio		4,157,545	7,946,627	9,647,079	21.4	41,000	235.3	5
Oklahoma		790,391**	2,233,351	2,303,408	03.1	69,031	33.4	27
Oregon		413,536	1,521,341	1,757,691	15.5	96,315	18.2	32
Pennsylvania	434,373	6,302,115	10,498,012	11,239,301	07.1	45,045	249.5	3
Rhode Island	68,825	428,556	791,896	841,852	06.3	1,058	795.7	39
South Carolina	249,073	1,340,316	2,117,027	2,359,234	11.4	30,305	77.8	26
South Dakota		401,570	652,740	676,738	03.7	76,536	8.8	40
Tennessee	35,691	2,020,616	3,291,718	3,536,240	07.4	41,797	84.6	17
Texas		3,048,710	7,711,194	9,488,620	23.0	263,513	36.0	6
Utah		276,749	688,862	886,926	28.8	82,346	10.8	38
Vermont	85,425	343,641	377,747	387,291	02.5	9,278	41.7	47
Virginia	747,610	1,854,184	3,318,680	3,903,555	17.6	39,893	97.9	16
Washington		518,103	2,378,963	2,829,871	19.0	66,786	42.3	23
West Virginia		958,800	2,005,552	1,847,936	07.9 M	24,080	76.7	30
Wisconsin		2,069,042	3,434,575	3,930,312	14.4	54,705	71.8	14
Wyoming		92,531	290,529	327,531	12.7	97,506	3.4	48

elliminary reports. ** Includes population of Indian Territory; 1900, 392,960.
 TE: M = percent loss.

Population and Area of Major U. S. Cities, Census Years, 1920-1960**

(Over 50,000 population in 1960)

Source: U. S. Bureau of the Census.

City	1920 population	1940 population	1950 population	1960 population	1960 rank	% increase, 1950-60	Area sq. m.
Albany, Tex.			45,570	89,428	153	96.2	
Akron, Ohio	208,435	244,791	274,605	287,592	47	4.7	53
Alameda, Calif.	28,806	36,256	64,430	53,606	288	16.8*	10.7
Albany, N. Y.	113,344	130,577	134,995	128,011	98	5.2*	19.0
Albuquerque, N. Mex.	15,157	35,449	96,815	198,856	64	105.4	47.9
Alexandria, Va.	18,060	33,523	61,787	90,385	152	46.3	7.5
Alhambra, Calif.	9,096	38,935	51,359	54,464	279	6.0	7.0
Allentown, Pa.	73,502	96,904	106,756	108,558	119	1.7	15.9
Altona, Pa.	60,331	80,214	77,177	69,083	212	10.5*	10.0
Amarillo, Tex.	15,494	51,686	74,246	137,083	92	84.6	20.9
Ann Arbor, Mich.			48,251	67,547	218	40.0	
Asheville, N. C.	28,504	51,310	53,000	58,737	261	10.8	14.1
Atlanta, Ga.	200,616	302,288	331,314	485,425	28	46.5	36.9
Atlantic City, N. J.	50,707	64,094	61,657	58,006	266	5.9*	11.1
Augusta, Ga.	52,548	65,919	71,508	69,368	210	3.0*	9.1
Aurora, Ill.	36,397	47,170	50,576	63,498	234	25.5	8.2
Austin, Tex.	34,876	87,930	132,459	185,967	72	40.4	32.1
Bakersfield, Calif.			34,784	56,145	275	61.4	
Baltimore, Md.	733,826	859,100	949,708	921,363	11	3.0*	78.1
Baton Rouge, La.	21,782	34,719	125,629	151,130	85	20.3	30.1
Bay City, Mich.	47,554	47,956	52,523	53,247	290	1.4	9.1
Bayonne, N. J.	76,754	79,198	77,203	73,918	197	4.3*	5.1
Beaumont, Tex.	40,422	59,061	94,014	118,477	106	26.0	31.1
Berkeley, Calif.	56,036	85,547	113,805	108,539	120	4.6*	9.1
Berwyn, Ill.	14,150	48,451	51,280	54,162	284	5.6	3.1
Bethlehem, Pa.	50,358	58,490	66,340	75,055	194	13.1	18.3
Billings, Mont.			31,834	52,249	294	64.1	
Binghamton, N. Y.	66,800	78,309	80,674	75,135	193	6.9*	10.0
Birmingham, Ala.	178,806	267,583	326,037	338,569	39	3.8	65.5
Bloomfield, N. J.			49,307	51,961	297	5.4	
Boston, Mass.	748,060	770,816	801,444	677,626	17	15.4*	47.7
Bridgeport, Conn.	143,555	147,121	158,709	155,644	84	1.9*	14.1
Brockton, Mass.	66,254	62,343	62,860	72,539	199	15.5	21.1
Buffalo, N. Y.	506,775	575,901	580,132	528,387	24	8.9*	39.9
Burbank, Calif.	2,913	34,337	78,577	87,895	160	11.9	16.5
Cambridge, Mass.	109,694	110,879	120,740	106,813	124	11.5*	6.5
Camden, N. J.	116,309	117,536	124,555	115,363	109	7.4*	8.8
Canton, Ohio	87,091	108,401	116,912	112,750	112	3.6*	14.4
Cedar Rapids, Iowa	45,566	62,120	72,296	90,623	150	25.3	25.5
Charleston, S. C.	67,957	71,275	70,174	60,182	254	14.2*	5.5
Charleston, W. Va.	39,608	67,914	73,501	85,132	165	15.8	9.9
Charlotte, N. C.	46,338	100,899	134,042	200,878	63	49.9	30.0
Chattanooga, Tenn.	57,895	128,163	131,041	127,709	99	2.5*	28.8
Chester, Pa.	58,030	59,285	66,039	63,063	238	4.5*	4.4
Chicago, Ill.	2,701,705	3,396,808	3,620,962	3,516,258	2	2.9*	207.7
Chicopee, Mass.			49,211	61,110	249	24.2	
Cicero, Ill.	44,995	64,712	67,544	69,520	208	2.9	5.5
Cincinnati, Ohio	401,247	455,610	503,998	487,462	27	3.3*	75.5
Cleveland, Ohio	796,841	878,336	914,808	869,867	12	4.9*	75.5
Cleveland Heights, Ohio	15,236	54,992	59,141	61,633	248	4.2	8.9
Clifton, N. J.	26,470	48,827	64,511	81,831	174	26.8	11.1
Colorado Springs, Colo.			45,472	69,181	211	52.1	
Columbia, S. C.	37,524	62,396	86,914	98,690	136	13.5	12.1
Columbus, Ga.	31,125	53,280	79,611	115,741	108	45.4	12.1
Columbus, Ohio	237,031	306,087	375,901	465,151	32	23.7	39.9
Compton, Calif.			47,991	70,888	206	47.7	
Corpus Christi, Tex.	10,522	57,301	108,287	165,698	79	53.0	21.1
Council Bluffs, Iowa			45,429	54,208	282	19.3	
Covington, Ky.	57,121	62,018	64,452	58,934	260	8.6*	6.1
Cranston, R. I.	29,407	47,085	55,060	65,694	229	19.3	28.1
Dallas, Tex.	158,976	294,734	434,462	672,029	18	54.7	112.1
Davenport, Iowa	56,727	66,039	74,549	88,738	157	19.0	18.1
Dayton, Ohio	152,559	210,718	243,872	258,196	54	5.9	28.1

Population-Cities

City	1920 population	1940 population	1950 population	1960 population	1960 rank	% increase, 1950-60	Area sq. mi.
Ann Arbor, Mich.	2,470	63,584	94,994	111,077	115	16.9	25.3
Chicago, Ill.	43,818	59,305	66,269	77,302	189	16.6	9.3
Denver, Colo.	256,491	322,412	415,786	489,217	26	17.7	66.8
Des Moines, Iowa	126,468	159,819	177,965	207,054	60	16.3	54.9
Detroit, Mich.	993,678	1,623,452	1,849,568	1,655,681	8	10.5*	139.6
Fort Worth, Ga.	.....	.....	43,617	74,787	195	71.5	.....
Fresno, Calif.	.....	.....	.....	82,481	171	.....	.....
Hartford, Conn.	.....	.....	49,671	58,358	264	13.5	.....
Minneapolis, Minn.	98,917	101,065	104,511	104,528	127	.8	62.3
New York, N. C.	21,719	60,195	71,311	77,772	188	9.1	13.2
Philadelphia, Pa.	35,967	54,637	54,263	57,086	272	5.2	10.4
Pittsburgh, Pa.	50,710	68,945	79,340	76,702	190	3.3*	3.9
St. Louis, Ill.	66,767	75,609	82,295	81,540	178	.9*	13.4
San Antonio, Tex.	77,560	96,810	130,485	272,239	50	108.6	25.6
San Diego, N. J.	95,783	109,912	112,817	107,377	122	4.8*	11.7
San Francisco, Calif.	93,372	116,955	130,803	135,057	93	3.3	18.8
Cincinnati, Ohio	.....	.....	41,396	62,706	240	51.5	.....
Portland, Ore.	.....	.....	35,879	50,169	310	39.8	.....
San Jose, Calif.	37,234	65,389	73,641	79,179	183	7.5	8.2
Indianapolis, Ind.	85,264	97,062	128,636	140,474	91	9.2	18.0
Boston, Mass.	120,485	115,428	111,963	99,427	134	11.2*	33.9
Ann Arbor, Mich.	91,599	151,543	163,143	194,940	66	19.5	29.3
Orlando, Fla.	.....	.....	36,328	81,806	175	125.2	.....
Little Rock, Ark.	.....	.....	47,942	52,823	293	10.2	.....
Dayton, Ohio	86,549	118,410	133,607	160,883	83	20.4	18.8
Fort Worth, Tex.	106,482	177,662	278,778	353,388	38	26.8	93.7
San Francisco, Calif.	45,086	60,685	91,669	133,062	95	45.2	15.0
San Antonio, Ala.	14,737	36,975	55,725	57,409	269	3.0	27.2
San Antonio, Tex.	44,255	60,862	66,568	65,662	230	1.4*	8.1
Grover, Calif.	.....	.....	3,762	84,417	166	2,143.9	.....
Indianapolis, Ind.	55,378	111,719	133,911	177,913	75	32.9	41.6
San Francisco, Calif.	13,536	82,582	95,702	118,330	107	23.6	20.3
Rapids, Mich.	137,634	164,292	176,515	175,741	76	4*	23.4
Billings, Mont.	.....	.....	39,214	55,246	278	40.9	.....
Bay, Wisc.	31,017	46,235	52,735	62,653	241	18.8	13.9
Boston, N. C.	19,861	59,319	74,389	119,283	104	60.4	18.2
San Francisco, S. C.	23,127	34,734	58,161	65,635	231	12.9	16.2
San Francisco, Ohio	39,675	50,592	57,951	73,743	198	27.3	7.6
Indianapolis, Ind.	36,004	70,184	87,594	111,316	114	27.1	23.5
San Francisco, Va.	.....	.....	5,966	88,890	155	1,389.9	.....
Boston, Pa.	75,917	83,893	89,544	78,869	185	11.9*	6.3
Indianapolis, Conn.	138,036	166,267	177,397	161,077	82	9.2*	17.4
Indianapolis, Calif.	.....	.....	14,272	72,396	200	407.3	.....
Indianapolis, Fla.	.....	.....	19,676	66,517	223	238.1	.....
Indianapolis, N. C.	.....	.....	39,973	61,652	247	54.2	.....
Indianapolis, Mass.	60,203	53,750	54,661	52,191	295	4.5*	21.0
Indianapolis, Hawaii	83,327	179,326	248,034	289,864	46	16.9	82.2
Indianapolis, Tex.	138,276	384,514	596,163	932,680	10	56.4	160.0
Indianapolis, W. Va.	50,177	78,836	86,353	82,045	173	5.0*	14.0
Indianapolis, Ala.	.....	.....	16,437	71,880	201	337.3	.....
Indianapolis, Mo.	.....	.....	36,963	61,968	245	67.6	.....
Indianapolis, Ind.	314,194	386,972	427,173	470,464	30	10.1	55.2
Indianapolis, Calif.	.....	.....	46,185	62,742	239	35.8	.....
Indianapolis, N. J.	25,480	55,328	59,201	59,151	259	1*	3.1
Indianapolis, Mich.	48,374	49,656	51,088	50,244	309	1.7*	10.2
Indianapolis, Miss.	22,817	62,107	98,271	143,960	89	46.5	27.0
Indianapolis, Fla.	91,558	173,065	204,517	197,948	65	3.2*	30.2
Indianapolis, N. J.	298,103	301,173	299,017	269,621	52	9.8*	13.0
Indianapolis, Pa.	67,327	66,668	63,232	53,636	287	15.2*	5.6
Indianapolis, Ill.	38,442	42,365	51,601	66,359	226	28.6	7.7
Indianapolis, Mich.	48,487	54,097	57,704	81,333	179	40.9	8.8
Indianapolis, Kans.	101,177	121,458	129,553	121,499	103	6.2*	18.7
Indianapolis, Mo.	324,410	399,178	456,622	468,325	31	2.6	80.6
Indianapolis, Wis.	40,472	48,765	54,368	66,381	225	21.1	7.6
Indianapolis, Ohio	.....	.....	.....	54,289	281	.....*	.....
Indianapolis, Tenn.	77,818	111,580	124,769	110,089	117	11.8*	25.4
Indianapolis, La.	.....	.....	41,272	62,395	243	51.2	.....
Indianapolis, Calif.	.....	.....	.....	67,015	220	1...*	.....
Indianapolis, Ohio	41,732	69,160	68,071	65,787	228	3.4*	5.6

City	1920 population	1940 population	1950 population	1960 population	1960 rank	% increase, 1950-60	Area sq. mi.
Lancaster, Pa.	53,150	61,345	63,774	59,420	257	6.8*	4.3
Lansing, Mich.	57,327	78,753	92,129	108,128	121	17.4	14.1
Laredo, Tex.	22,710	39,274	51,910	60,912	251	17.3	13.5
Las Vegas, Nevada			24,624	63,453	235	157.7	
Lawrence, Mass.	94,270	84,323	80,536	71,865	202	10.8*	6.7
Lawton, Okla.			34,757	60,346	253	73.6	
Lexington, Ky.	41,534	49,304	55,534	62,294	244	12.2	5.1
Lincoln, Nebr.	54,948	81,984	98,884	127,433	100	28.9	23.0
Little Rock, Ark.	65,142	88,039	102,213	105,747	126	3.5	21.0
Livonia, Mich.			17,534	66,539	222	279.5	
Long Beach, Calif.	55,593	164,271	250,767	323,996	40	29.2	34.7
Lorain, Ohio	37,295	44,125	51,202	68,080	215	33.0	11.1
Los Angeles, Calif.	570,673	1,504,277	1,970,358	2,448,018	4	24.2	450.0
Louisville, Ky.	234,891	319,077	369,129	385,688	35	4.5	39.1
Lowell, Mass.	112,759	101,389	97,249	92,104	147	5.3*	12.3
Lubbock, Tex.	4,051	31,853	71,747	128,068	97	78.5	17.7
Lynchburg, Va.			47,727	54,415	280	14.0	
Lynn, Mass.	99,148	98,123	99,738	94,191	144	5.6*	10.1
Macon, Ga.	52,995	57,865	70,252	68,860	213	2.0*	12.2
Madison, Wis.	38,378	67,447	96,056	126,301	101	31.5	15.3
Malden, Mass.	49,103	58,010	59,804	57,527	268	3.8*	4.3
Manchester, N. H.	78,384	77,685	82,732	87,152	161	5.3	32.2
Medford, Mass.	39,038	63,083	66,113	64,854	233	1.9*	8.3
Memphis, Tenn.	162,351	292,942	396,000	491,691	25	24.2	104.4
Meriden, Conn.			44,088	50,966	305	15.6	
Miami, Fla.	29,571	172,172	249,276	282,600	48	13.4	34.4
Miami Beach, Fla.			46,282	61,740	246	33.4	
Midland, Tex.			21,713	62,497	242	187.8	
Milwaukee, Wis.	457,147	587,472	637,392	734,788	15	15.3	50.0
Minneapolis, Minn.	380,582	492,370	521,718	481,026	29	7.8*	53.3
Mobile, Ala.	60,777	78,720	129,009	191,640	67	35.4	25.5
Monroe, La.			38,572	51,931	299	34.6	
Montgomery, Ala.	43,464	78,084	106,525	133,874	94	25.7	26.6
Mount Vernon, N. Y.	42,726	67,362	71,899	75,491	192	5.0	4.4
Muncie, Ind.	36,524	49,720	58,479	67,966	216	16.2	10.0
Nashville, Tenn.	118,342	167,402	174,307	165,406	80	5.1*	22.1
New Bedford, Mass.	121,217	110,341	109,189	101,515	131	7.0*	19.5
New Britain, Conn.	59,316	68,685	73,726	81,569	177	10.6	13.3
New Haven, Conn.	162,537	160,605	164,443	148,923	86	9.4*	17.7
New Orleans, La.	387,219	494,537	570,445	620,979	19	8.9	199.5
New Rochelle, N. Y.	36,213	58,408	59,725	76,474	191	28.0	9.5
New York, N. Y.	5,620,048	7,454,995	7,891,957	7,710,346	1	2.3*	315.5
Bronx, N. Y.	732,016	1,394,711	1,451,277	1,415,025	9	2.5*	43.3
Brooklyn, N. Y.	2,018,356	2,698,285	2,738,175	2,604,001	3	4.9*	76.4
Manhattan, N. Y.	2,284,103	1,889,924	1,960,101	1,668,172	7	14.9*	22.1
Queens, N. Y.	469,042	1,297,634	1,550,849	1,802,119	6	16.2	113.3
Richmond, N. Y.	116,531	174,441	191,555	221,029	56	15.4	66.6
Newark, N. J.	414,524	429,760	438,776	396,252	34	9.7*	22.3
Newport News, Va.			42,358	112,684	113	166.0	
Newton, Mass.	46,054	69,873	81,994	91,584	149	11.7	11.1
Niagara Falls, N. Y.	50,760	78,029	90,872	101,829	130	12.1	11.1
Norfolk, Va.	115,777	144,332	213,513	272,908	49	27.8	22.0
North Little Rock, Ark.			44,097	57,211	271	29.7	
Norwalk, Calif.				88,643	159		
Norwalk, Conn.			49,460	67,527	219	36.5	
Oak Park, Ill.	39,858	66,015	63,529	60,408	252	4.9*	
Oakland, Calif.	216,261	302,163	384,575	361,082	37	6.1*	55.0
Odessa, Tex.			29,495	79,123	184	168.3	
Ogden, Utah	32,804	43,688	57,112	70,394	207	23.3	11.1
Oklahoma City, Okla.	91,295	204,424	243,504	317,542	41	30.4	55.0
Omaha, Nebr.	191,601	223,844	251,117	300,674	45	19.7	44.1
Orlando, Fla.	9,282	36,736	52,367	86,880	162	65.9	11.1
Palo Alto, Calif.			25,475	52,171	296	104.8	
Parma, Ohio			28,897	82,666	170	186.1	
Pasadena, Calif.	45,354	81,864	104,577	114,942	110	9.9	22.0
Pasadena, Tex.			22,483	58,613	262	160.7	
Passaic, N. J.	63,841	61,394	57,702	53,770	286	6.8*	
Paterson, N. J.	135,875	139,656	139,336	141,385	90	1.5	
Pawtucket, R. I.	64,248	75,797	81,436	80,492	182	1.2*	

Population-Cities

City	1920 population	1940 population	1950 population	1960 population	1960 rank	% increase 1950-60	Area sq. mi.
cola, Fla.			43,479	56,671	274	30.3	....
l, Ill.	76,121	105,087	111,856	102,751	129	8.1*	12.9
elphia Pa.	1,823,779	1,931,334	2,071,605	1,960,036	5	5.4*	127.2
ix, Ariz.	29,053	65,414	106,818	430,459	33	303.0	17.1
urgh, Pa.	588,343	671,659	676,806	600,684	20	11.2*	54.2
eld, Mass.	41,763	49,684	53,348	57,223	270	7.3	40.9
na, Calif.			35,405	66,587	221	88.1	....
c, Mich.	34,273	66,626	73,681	81,651	176	10.8	19.8
Arthur, Tex.	22,251	46,140	57,530	60,994	250	6.0	12.2
nd, Maine.	69,272	73,643	77,634	74,136	196	4.5*	21.6
nd, Oreg.	258,288	305,394	373,628	370,339	36	.9*	64.1
outh, Va.	54,387	50,745	80,039	106,884	123	33.5	10.2
ence, R. I.	237,595	253,504	248,674	206,352	61	17.0*	17.9
o, Colo.	43,050	52,162	63,685	90,440	151	42.0	10.6
y, Mass.	47,876	75,810	83,835	86,860	163	3.6	16.8
, Wis.	58,593	67,195	71,193	88,656	158	24.5	9.2
h, N. C.	24,418	46,897	65,679	93,097	145	41.7	11.0
ng, Pa.	107,784	110,568	109,320	97,646	137	10.7*	8.8
Nev.			32,497	50,938	306	56.7	....
ond, Calif.	16,843	23,642	99,545	71,375	204	28.3*	14.5
ond, Va.	171,667	193,042	230,310	218,028	57	5.3*	37.1
ide, Calif.			46,764	83,714	167	79.0	....
ke, Va.	50,842	69,287	91,921	96,098	140	4.5	26.5
ster, N. Y.	295,750	324,975	332,488	316,074	42	4.9*	36.0
sland, Ill.			48,710	51,056	304	4.8	....
rd, Ill.	65,651	84,637	92,927	125,955	102	35.5	14.0
N. Y.			41,682	51,131	303	22.7	....
lle, Mich.			15,816	50,676	307	220.4	....
Oak, Mich.			46,898	81,140	181	73.0	....
mento, Calif.	65,908	105,958	137,572	190,699	68	38.6	16.9
w, Mich.	61,903	82,794	92,918	97,031	138	4.4	16.6
ir Shores, Mich.			19,823	77,879	187	292.9	....
eph, Mo.	77,939	75,711	78,588	78,370	186	.3*	14.1
is, Mo.	772,897	816,048	856,796	740,424	14	13.6*	61.0
ul, Minn.	234,698	287,736	311,349	313,209	44	.6	52.2
ersburg, Fla.	14,237	60,812	96,738	178,088	74	83.9	52.2
ake City, Utah	118,110	149,934	182,121	188,197	70	3.3	53.9
ngelo, Tex.	10,050	25,802	52,093	57,811	267	11.0	28.8
ntonio, Tex.	161,379	253,854	408,442	584,471	21	43.1	69.5
ernardino, Calif.	18,721	43,646	63,058	91,728	148	45.5	19.5
ego, Calif.	74,361	203,341	334,387	547,294	23	63.7	99.4
ancisco, Calif.	506,676	634,536	775,357	715,609	16	7.7*	44.6
se, Calif.	39,642	68,457	95,280	202,571	62	112.6	17.0
andro, Calif.			27,542	66,405	224	141.1	....
ateo, Calif.			41,782	69,369	209	66.0	....
Ana, Calif.			45,533	99,564	133	118.7	....
Barbara, Calif.			44,913	58,259	265	29.7	....
Clara, Calif.			11,702	58,577	263	400.6	....
Monica, Calif.	15,252	53,500	71,595	82,845	169	15.7	8.0
ah, Ga.	83,252	95,996	119,638	147,378	87	23.2	14.6
ctady, N. Y.	88,723	87,549	91,785	81,284	180	11.7*	10.2
on, Pa.	137,783	140,404	125,536	109,891	118	12.5*	24.9
, Wash.	315,312	368,302	467,591	550,525	22	17.7	70.8
port, La.	43,874	98,167	127,206	163,777	81	28.7	24.0
City, Iowa	71,227	82,364	83,991	89,168	154	6.2	45.0
alls, S. Dak.	25,202	40,832	52,696	65,013	232	23.4	12.7
, Ill.			14,832	59,358	258	300.2	....
ille, Mass.	93,091	102,177	102,351	94,349	142	7.8*	4.1
end, Ind.	70,983	101,268	115,911	132,100	96	14.0	20.2
Gate, Calif.		26,945	51,116	53,396	289	4.5	7.0
e, Wash.	104,437	122,001	161,721	179,729	73	11.1	41.5
eld, Ill.	59,183	75,503	81,628	83,001	168	7.1	10.4
eld, Mass.	129,614	149,554	162,399	173,736	77	7.0	31.7
eld, Mo.	39,631	61,238	66,731	95,764	141	43.5	13.6
eld, Ohio	60,840	70,662	78,508	82,075	172	4.5	12.1
d, Conn.	35,096	47,938	74,293	92,347	146	24.3	37.6
n, Calif.	40,296	54,714	70,853	85,452	164	20.6	11.8
ale, Calif.			9,829	53,176	291	441.0	....
ee, N. Y.	171,717	205,967	220,583	215,291	58	2.4*	25.3

City	1920 population	1940 population	1950 population	1960 population	1960 rank	% increase, 1950-60	Area sq. m.
Tacoma, Wash.....	96,965	109,408	143,673	146,734	88	2.1	47.9
Tampa, Fla.....	51,608	108,391	124,681	270,610	51	117.0	19.6
Terre Haute, Ind.....	66,083	62,693	64,214	71,851	203	11.9	12.7
Toledo, Ohio.....	243,164	282,349	303,616	315,643	43	4.0	38.3
Topeka, Kans.....	50,022	67,833	78,791	118,681	105	50.6	12.9
Torrance, Calif.....			22,241	100,635	132	352.5	
Trenton, N. J.....	119,289	124,697	128,009	114,015	111	10.9*	
Troy, N. Y.....	71,996	70,304	72,311	66,092	227	7.2*	9.1
Tucson, Ariz.....			45,454	209,305	59	360.5	
Tulsa, Okla.....	72,075	142,157	182,740	258,563	53	41.5	26.3
Tuscaloosa, Ala.....			46,396	63,125	236	36.1	
Tyler, Tex.....			38,968	51,158	302	31.3	
Union City, N. J.....	20,651	56,173	55,537	51,935	298	6.5*	1.1
University City, Mo.....			39,892	51,362	301	28.8	
Utica, N. Y.....	94,156	100,518	101,531	99,262	135	2.2*	15.5
Vallejo, Calif.....			26,038	59,565	255	128.8	
Waco, Tex.....	38,500	55,982	84,706	96,776	139	14.2	26.1
Waltham, Mass.....			47,187	54,172	283	14.8	
Warren, Mich.....			729	88,766	156	12,109.9	
Warren, Ohio.....			49,856	59,546	256	19.4	
Warwick, R. I.....			43,028	68,281	214	58.7	
Washington, D. C.....	437,571	663,091	802,178	745,603	13	6.9*	61.1
Waterbury, Conn.....	91,715	99,314	104,477	106,167	125	1.6	27.7
Waterloo, Iowa.....	36,230	51,743	65,198	71,042	205	9.0	31.1
Waukegan, Ill.....			38,946	55,465	277	42.4	
Wauwatosa, Wis.....			33,324	56,743	273	70.3	
West Covina, Calif.....			4,499	51,631	300	1,047.6	
West Palm Beach, Fla.....			43,162	55,539	276	28.7	
West Allis, Wis.....			42,959	67,634	217	57.4	
Wheeling, W. Va.....	56,208	61,099	58,891	52,885	292	10.2*	10.6
White Plains, N. Y.....			43,466	50,453	308	16.1	
Wichita, Kans.....	72,217	114,966	168,279	254,262	55	51.1	28.9
Wichita Falls, Tex.....	40,079	45,112	68,042	103,204	128	51.7	14.6
Wilkes-Barre, Pa.....	73,833	86,236	76,826	63,068	237	17.9*	14.6
Wilmington, Del.....	110,168	112,504	110,356	94,262	143	16.4*	9.9
Winston-Salem, N. C.....	48,395	79,815	87,811	110,446	116	25.8	18.1
Worcester, Mass.....	179,754	193,694	203,486	186,247	71	8.5*	33.3
Yonkers, N. Y.....	100,176	142,598	152,798	189,242	69	23.9	11.1
York, Pa.....	47,512	56,712	59,953	53,927	285	10.1*	33.3
Youngstown, Ohio.....	132,358	167,720	168,330	165,709	78	1.6*	33.3

* Percent loss. ** Preliminary reports.

Territorial Expansion of the United States, Since 1790

Source: U. S. Bureau of the Census.

Accession	Date	Area, sq. mi. ¹
CONTINENTAL UNITED STATES		
Territory in 1790		888,811
Louisiana Purchase	1803	827,192
Florida	1819	58,560
By treaty with Spain	1819	13,443
Texas	1845	390,144
Oregon	1846	285,580
Mexican Cession	1848	529,017
Gadsden Purchase	1853	29,640
Total		3,022,387

OUTLYING TERRITORY

Alaska ³	1867	586,400
Hawaii ³	1898	6,423
Puerto Rico	1899	3,435
Guam	1899	206
American Samoa	1900	76
Panama Canal Zone	1904	553
Corn Islands ²	1914	4

Accession	Date	Area sq.
Virgin Islands of U. S.	1917	
Trust territory	1947	
All other		
Total		60,000
Aggregate, 1950		3,622,000

¹ Total land and water area. ² Leased from Nicaragua for 99 years. ³ Became state in 1959.

Total Population U. S. and Possessions

Source: U. S. Bureau of the Census.

Area	1940	1950	1960
United States.....	131,669,275	150,697,361	179,668,000
Alaska ²	72,524	128,643	
American Samoa	12,908	18,937	
Canal Zone	51,827	52,822	
Guam	22,290	59,498	
Hawaii ²	423,330	499,794	
Puerto Rico.....	1,869,255	2,210,703	2,390,000
Virgin Is. of U. S.	24,889	26,665	
Total	134,146,298	153,694,423	182,111,000

¹ Preliminary reports. ² Became state in 1959. ³ Included in U. S. total.

CLIMATE



RELIGION



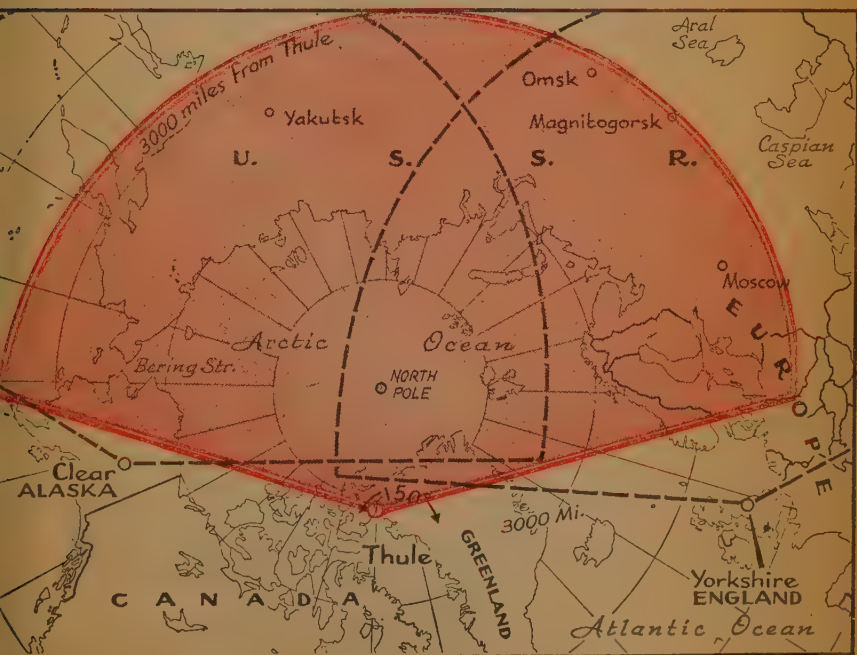
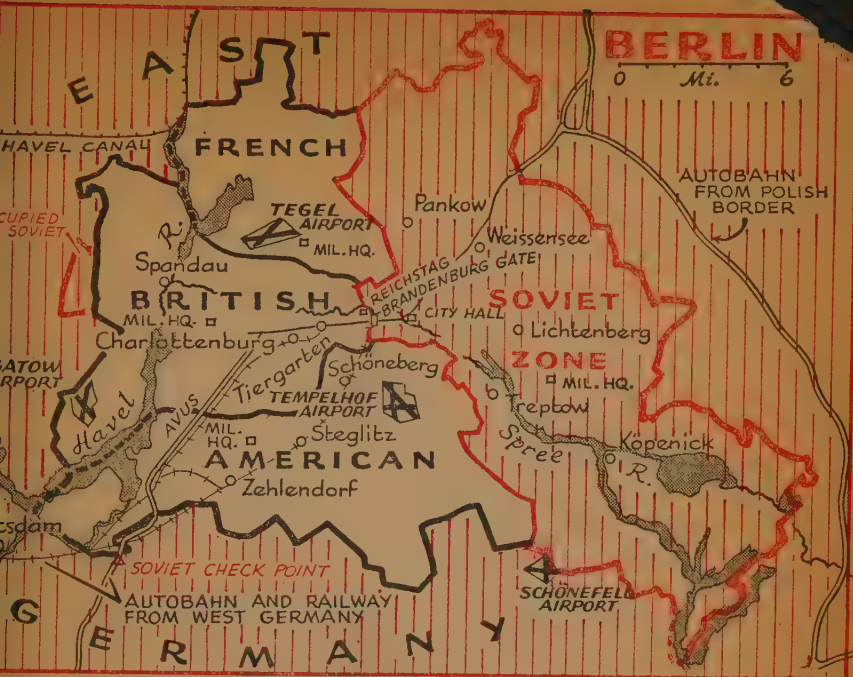


GERMANY AND DENMARK

— Autobahn

North Sea





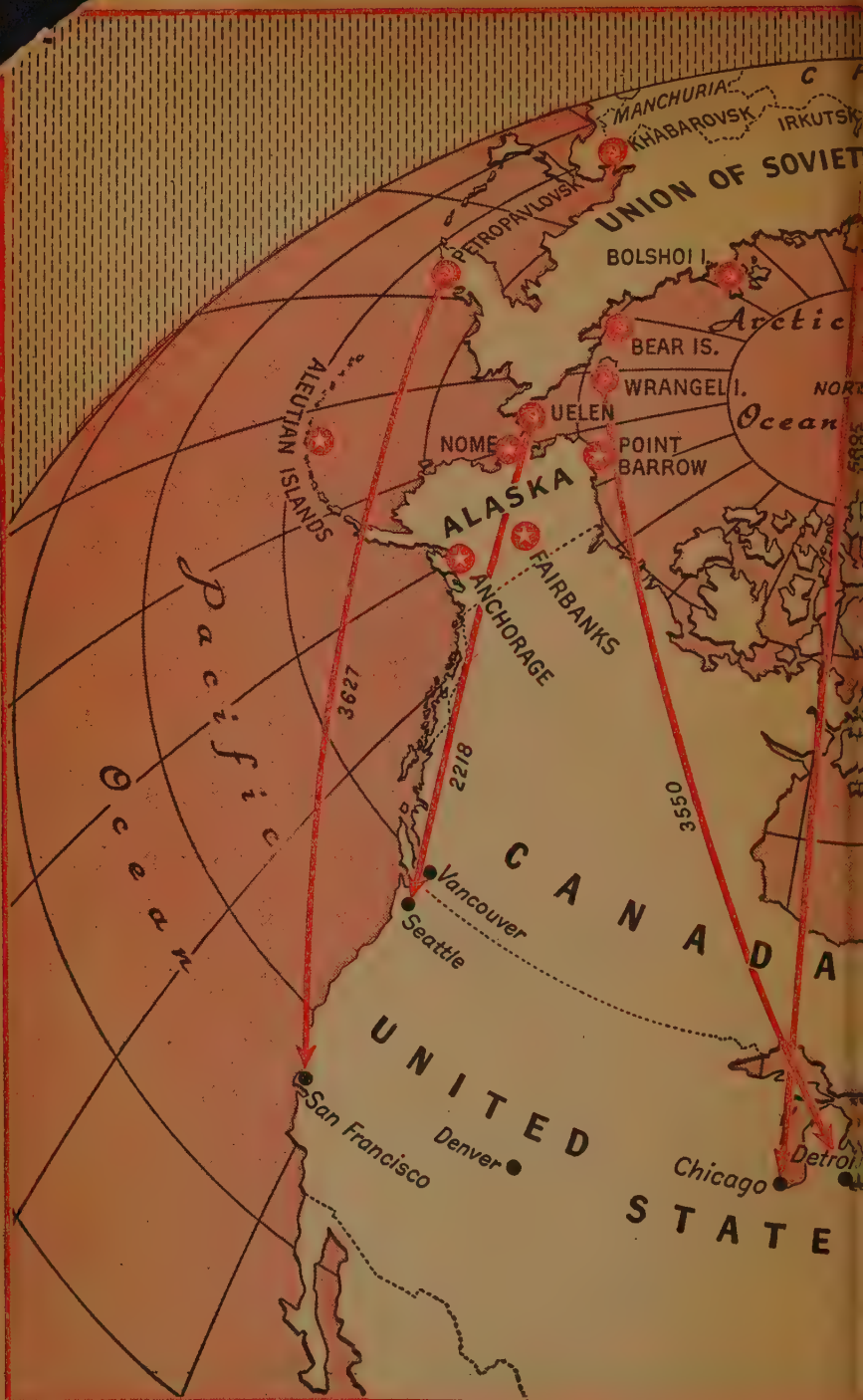




The development of the Polaris missile and of the submarines to carry them has given the United States a number of mobile missile bases which can change position at will and which will be very hard to detect. In fact a submarine hiding under the Arctic icepack may be considered virtually undetectable. The map shows positions which Polaris submarines might take. The two range circles are drawn for a range of 1,100 miles (that of the current Polaris missile) and for a range of 1,500 miles (the range of the improved Polaris missile now under development). It can be seen that a rather large area in Central Asia could not be reached with the 1,500-mile missile.

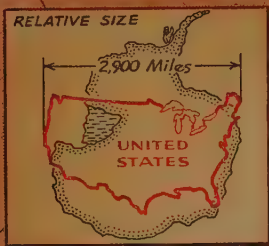
The different sizes of the range circles are caused by the distortion of the Mercator projection.

Each submarine carries 16 Polaris missiles which are ejected vertically by compressed air and ignite as soon as they break the surface of the water.





CLAIMS IN ANTARCTICA



UNITED STATES

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

BERMUDA
(Br.)

A vertical scale bar with the word "Miles" written vertically next to it. The bar has tick marks at 0 and 1000.

Atlantic Ocean





	NATO countries
	Iron Curtain areas
	Neutral areas
	U.S. airbases abroad





U.S.S.R.





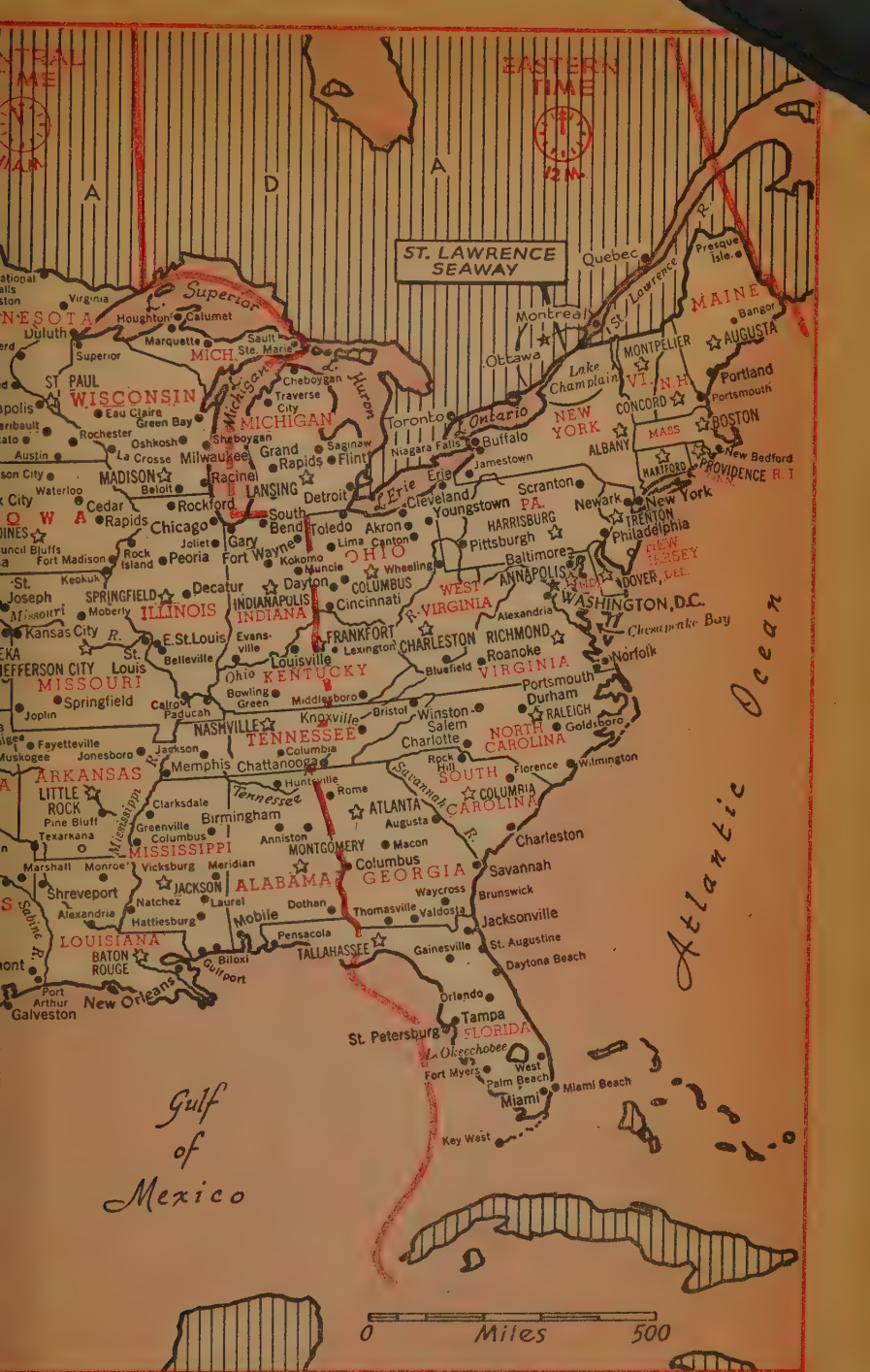














Atlantic

Осеан





PHOTO SECTION, 1959—1960



Paris Match from Pictorial Parade

CONQUERING HERO—President Eisenhower won the hearts of Parisians with his “Je vous aime tous” (“I love you all”). Parents brought their children to the parade route to De Gaulle’s Presidential Palace. Two seemed bewildered by difference in their flags.



Wayne Miller from Magnum

December



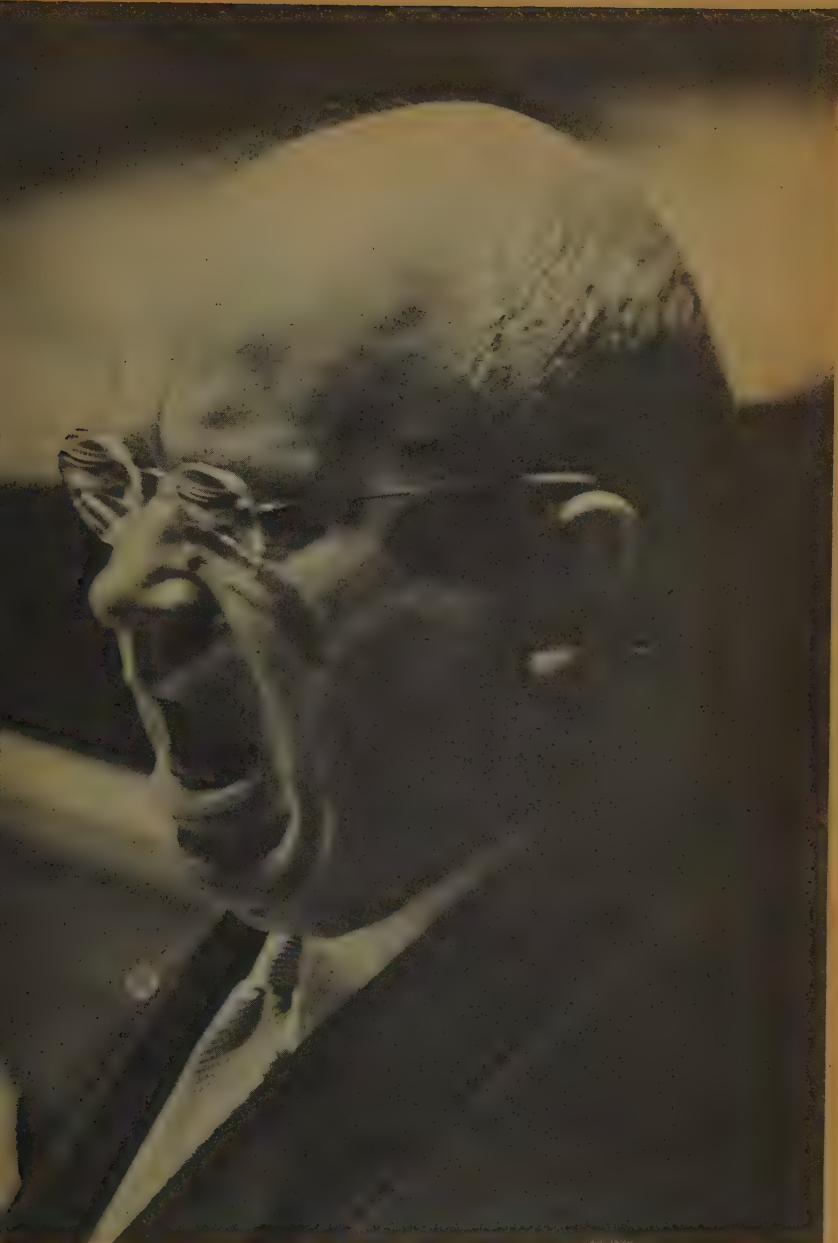
Camera Press-Pix

EVEL SIGHTSEEING—President Eisenhower and Prime Minister Nehru as they left the Taj Mahal in Agra, India. Between them is the President's daughter-in-law, Mrs. John Eisenhower.



Wide World

UNITED NATIONS: FREE WORLD—President Eisenhower as he addressed the General Assembly of the United Nations after its opening September, 1960.



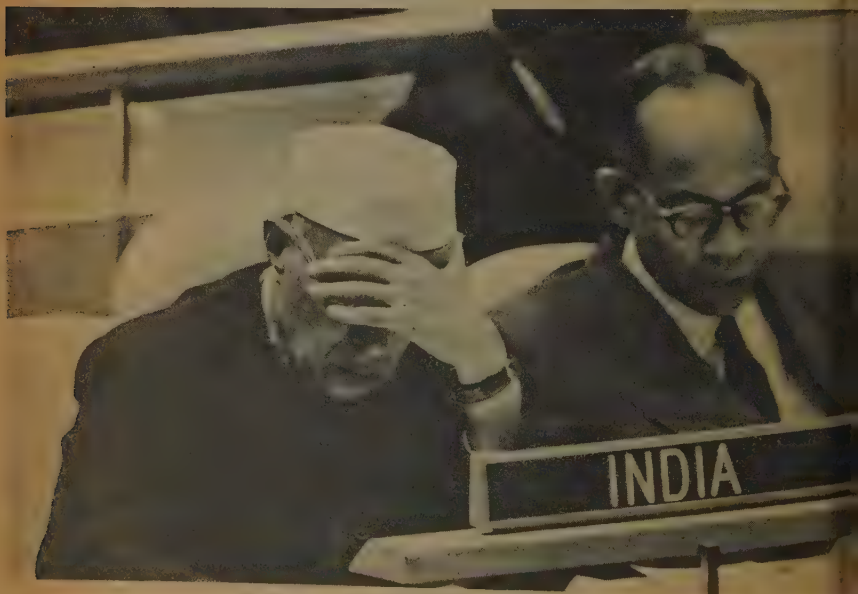
New York Times Photo

ED NATIONS: IRON CURTAIN—Soviet Premier Khrushchev ex-
the Communist point of view from the same dais during the beginning
S.



New York Times

SOPORIFIC EFFECT—Cuba's Premier Fidel Castro and bodyguard appear to be dozing during U.N. speech by Ghana's President Nkrumah.



New York Times

ATTENTIVE LISTENER—India's Prime Minister carefully follows text of speech by Bulgaria's U.N. delegate.



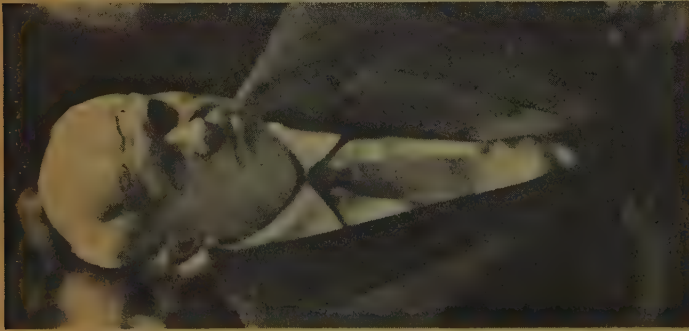
New York Times Photo

ORDER AND HERETIC—Premier Khrushchev comes over to confer with President Tito of Yugoslavia during U.N. session.



New York Times Photo

YUGOSLAV VISITOR—President Tito during a visit with President Eisenhower at the latter's New York headquarters for the U.N. session.



UNION OF SOVIET
SOCIALIST REPUBLICS

New York Times Photo



New York Times Photo

... remarks as



New York Times Photo

STEPHEN—Johansson KO's Patterson: wins title (top). Patterson
Johansson: regains title (bottom).



Paris Match from Pictoria's

BIRTH PANGS—Bangala tribesmen demonstrate in front of Parliament in the new Belgian Congo nation, seeking greater representation than they have received.



Black Star

REFUGEES FROM DISORDER—Belgian and other European residents awaiting evacuation from strife-torn Leopoldville in the Belgian Congo.



Ian Berry from Magnum

INTERVENES—U.N. soldiers keep rebellious Congolese tribesmen behind barbed wire.



Paris Match from Pictorial Parade

GIANS LEAVE—U.N. troops arrive by bus in Leopoldville as Belgian soldiers (foreground) prepare to leave.



Paul Popper, Ltd.,—European Press S.S.

ROYAL WEDDING—After the Archbishop of Canterbury pronounced the man and wife (top) Princess Margaret and Anthony Armstrong-Jones posed with their bridal party (bottom).

Camera Press





Camera Press-Pix

MINSTER ABBEY—As members of the royal family watch, the
s and her new husband march down the aisle after their marriage.



Wide World Photo

BROADWAY BLACKOUT—British actress Vivien Leigh (left) disapproves a strike by Actors' Equity Union against the producers, while Anne Bancroft registers emphatic approval.



Wide World Photo

FESTIVAL RIOT—Rhode Island State policeman calms demonstrator
melee at Newport when not all devotees were able to gain admission.



Central Press-Pix

(front row left to right) Montomery



Wide World Photo

AL AUDIENCE—President Eisenhower and Pope John XXIII bow to each other after a private interview in Rome.



New York Times Photo

SUAL GET-TOGETHER—West Germany's Chancellor Adenauer and Israel's Premier Ben-Gurion confer in New York.

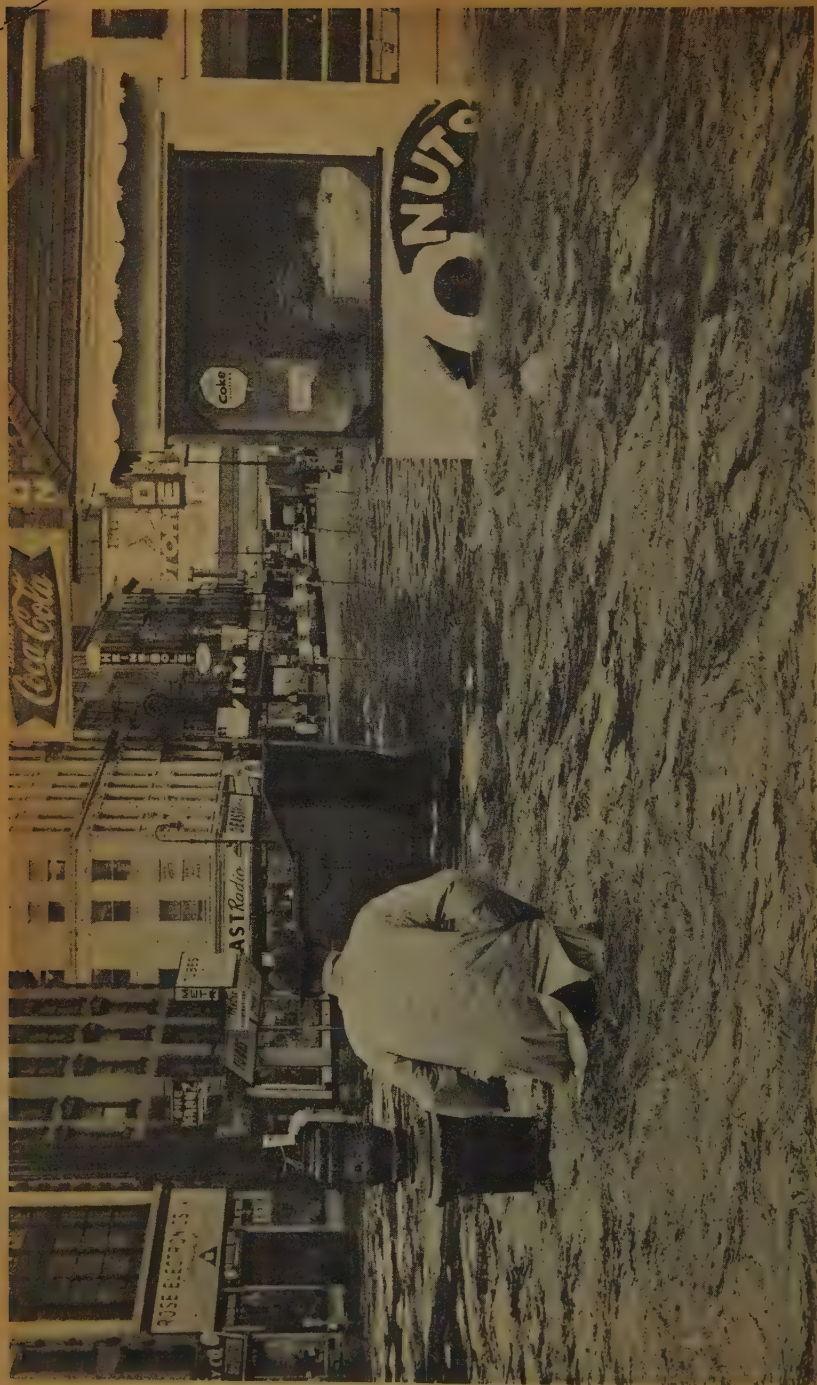


SPEEDWAY TRAGEDY—Two spectators were killed and 82 were injured when a temporary grandstand collapsed during the annual 500-mile



J. Parke Randall for The Indianapolis News

Day automobile race at the Indianapolis track.



New York Times Photo



New York Times Photo

GEROUS PASTIME—Knee-deep water flooded a New York bar during hurricane Donna (above), while the earthquake which shook Agadir disturbed bottles in a local cafe.

Tom King from Black Star





Paris Match from Pictorial

MOROCCAN EARTHQUAKE—The city of Agadir was evacuated as half-ruined structures prepared to topple and epidemics threatened the population.



Wide World Photo

ASTATION IN CHILE—A lone resident of the town of Castro sits in of rubble where business establishments once stood.



United Press International

SIT-IN STRIKES—To obtain equal service in Southern restaurants, Negro students staged sit-in strikes (top); policy of non-resistance met with behaviour such as that of bat-swinging white man (bottom).

Wide World



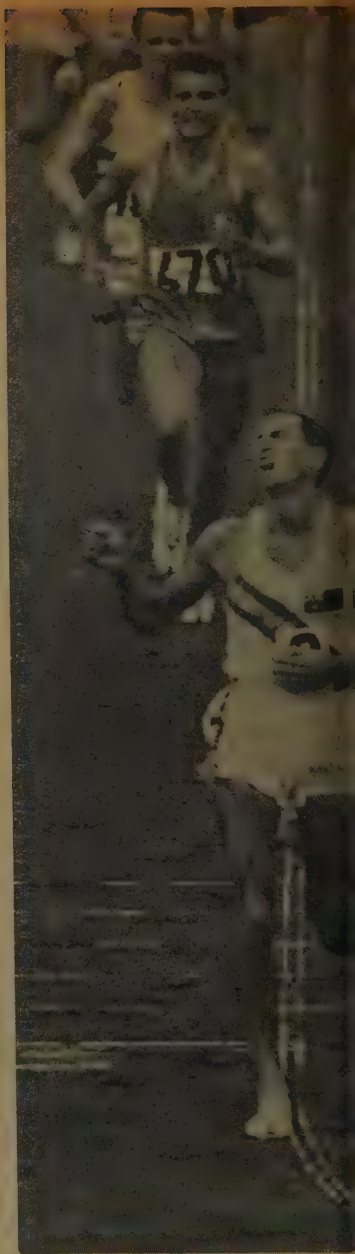


Wide World Photo

PIC WINNERS—Wilma Rudolph, only American to win three gold takes the women's 200-meter dash (above), while Livio Berutti, of ins the 200-meter men's event (below).

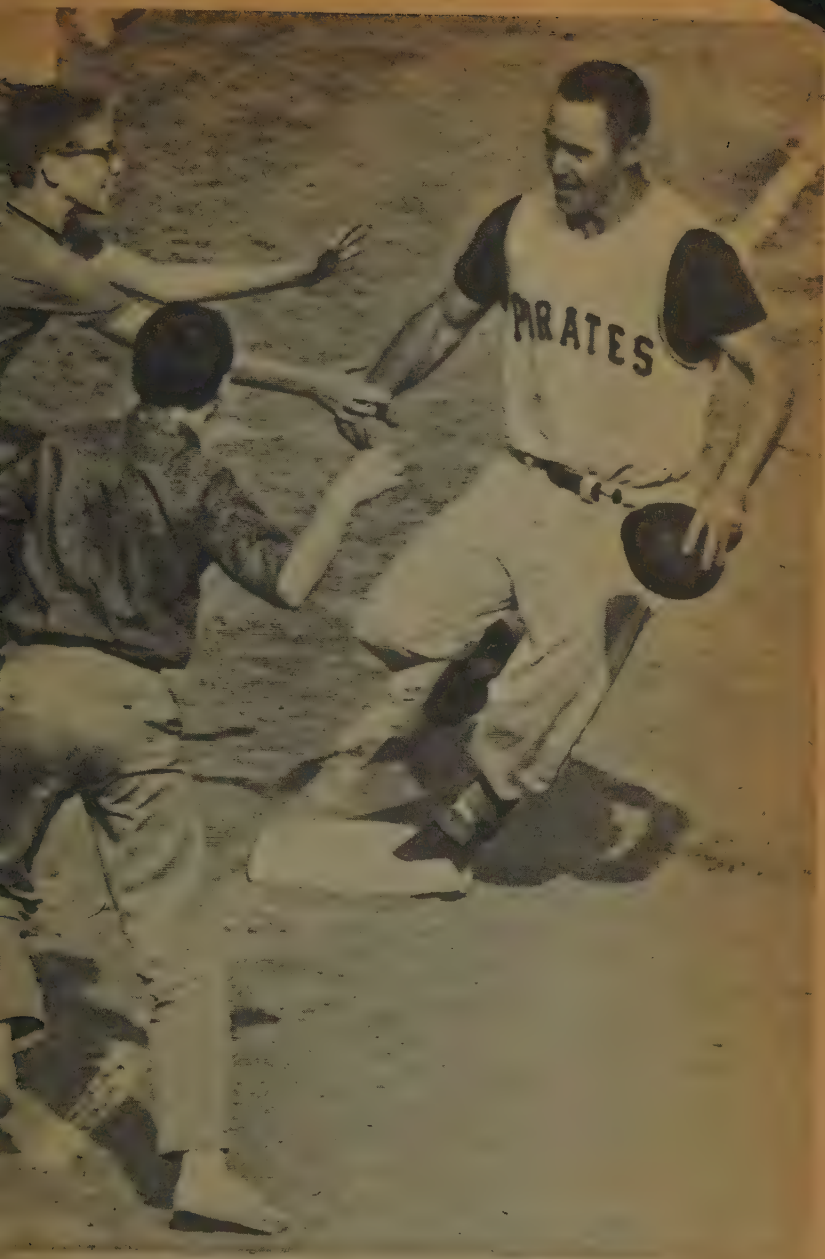
Paris Match from Pictorial Parade





Wide Wo

EFFORTS IN ROME—Herb Elliott, of Australia, strains at end of meter race (right), while Clifton Cushman, U.S.A., who finished se 400-meter hurdles, is helped after collapsing following race.



Wide World Photo

PIRATES LOSE!—Pittsburgh home run by Bill Mazeroski gives Pirates winning, seventh-game win in World Series. Score: Pittsburgh, 10—Yankees, 9. Series result: Pittsburgh, 4 games—Yankees, 3.



Wide World

VIOLENCE IN JAPAN—Liberal and Socialist members of the Diet battled for control of the Speaker's dais (above) during riot over a police nationalization bill. Premier Kishi (below) was knifed by an assailant in disturbance over ratification of the defense pact with the United States.

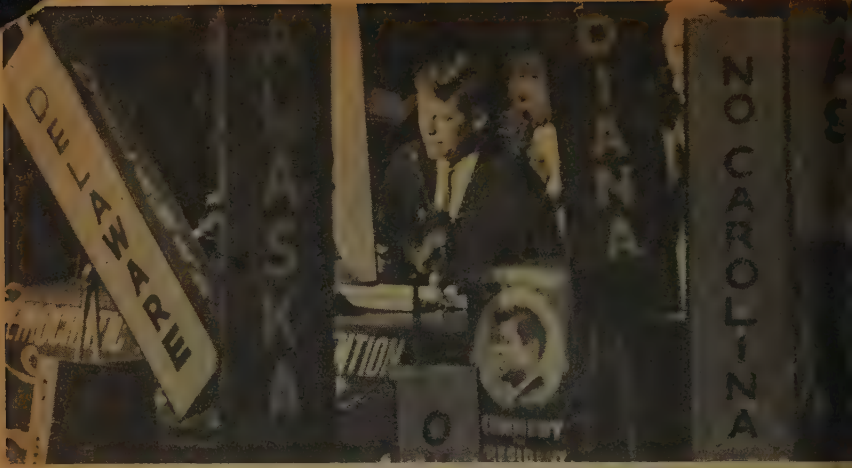
United Press International





United Press International

ASSASSINATION—Inejiro Asanuma, chairman of the Japanese Socialist party, was stabbed to death by a seventeen-year-old member of an extreme rightist group on Oct. 12, 1960.



Wide World Photo



Wide World Photo

NOMINATION—Senator Kennedy faces delegates who nominated (top).

CAMPAIGN—Democratic nominee rides a donkey (bottom).



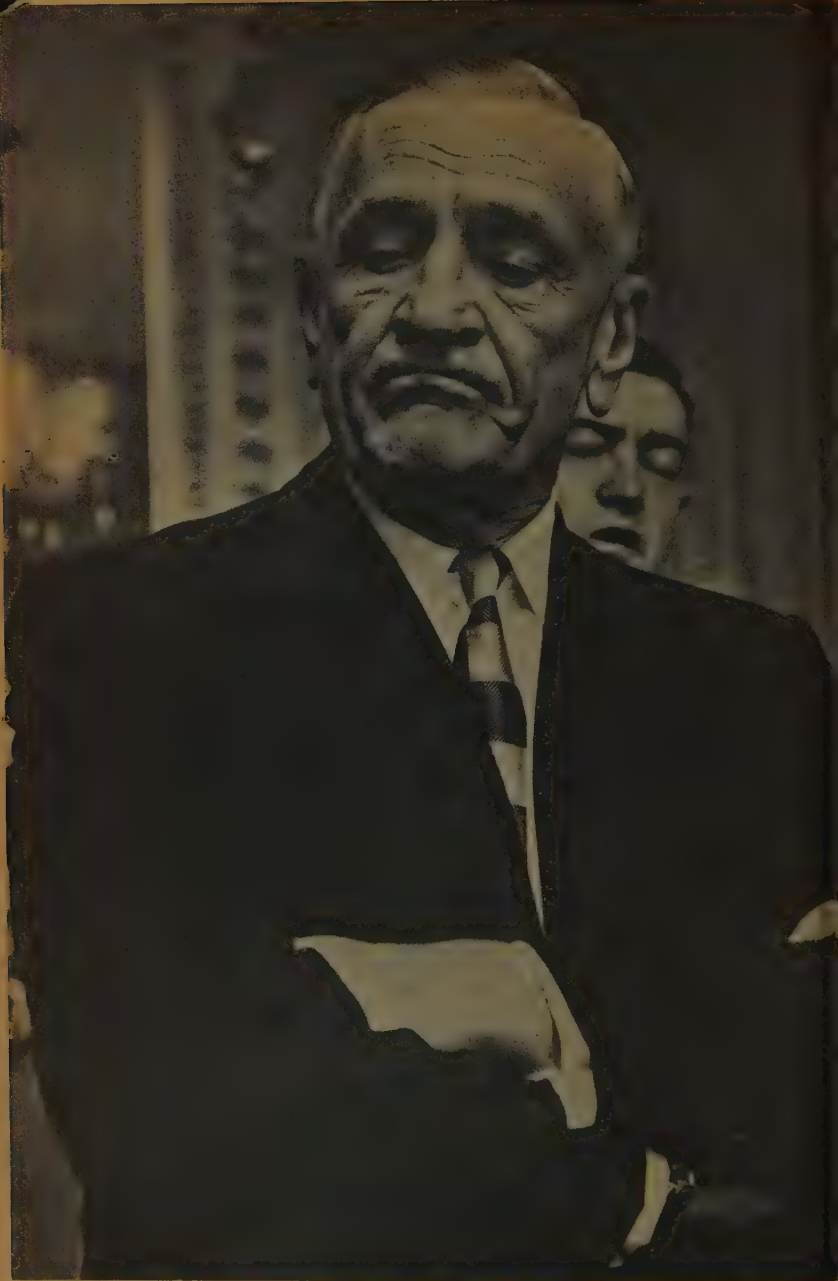
Wide World Photo

NATION—Vice-President and Mrs. Nixon are hailed by delegates to
al Republican Convention.



Wide World Photo

IGN—Henry Cabot Lodge, center, and fellow Republicans sample
at Coney Island, N.Y.



New York Time

DROPPING THE PILOT—Casey Stengel said, "I was told that my se
no longer were desired."

WORLD HISTORY



GUIDE TO MAIN HISTORICAL, POLITICAL, ECONOMIC, GEOGRAPHIC AND SOCIAL FACTS

Prepared by the Editorial Staff of the
INFORMATION PLEASE ALMANAC

ough the general Index at the back of the book lists each country covered in
ection, we have added this special index for quicker reference, plus a table of
Independent Countries.
E: Dependencies not listed below will be found following the mother country. For
see Index at back of book.

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NEWLY INDEPENDENT COUNTRIES (since 1950)

AFRICA

Country	Date of Independence	Previous Status
Cameroun	1960	Fr. Trust Territory
Central African Republic†	1960	Autonomous Rep., Member of Fr. Community
Republic of Chad†	1960	Autonomous Rep., Member of Fr. Community
Republic of the Congo (Brazzaville)†	1960	Autonomous Rep., Member of Fr. Community
Republic of the Congo (Leopoldville)	1960	Belgian Colony
Cyprus	1959	British Crown Colony
Republic of Dahomey††	1960	Autonomous Republic, Member of Fr. Community
Gabon Republic†	1960	Autonomous Republic, Member of Fr. Community
Ghana*	1957	Protectorate and British Trust Territory
Guinea	1958	French Overseas Territory
Republic of the Ivory Coast††	1960	Autonomous Republic, Member of Fr. Community
Libya	1951	Under British and French Military Administration
Malagasy Republic†	1960	Autonomous Republic, Member of Fr. Community
Republic of Mali††	1960	Autonomous Republic, Member of Fr. Community
Islamic Republic of Mauritania†	1960	Autonomous Republic, Member of Fr. Community
Morocco	1956	French and Spanish Protectorates
Republic of the Niger††	1960	Autonomous Republic, Member of Fr. Community
Federation of Nigeria*	1960	British Colony, Protectorate and Territory
Republic of Senegal†	1960	Autonomous Republic, Member of Fr. Community
Sierra Leone	1960	British Colony and Protectorate
Somalia*	1960	British Protectorate
Sudan	1956	Anglo-Egyptian Condominium
Togo	1960	French Trust Territory
Tunisia	1956	French Protectorate
Republic of the Upper Volta††	1960	Autonomous Republic, Member of Fr. Community

ASIA

odia.....	1954	Associated State of French Union
.....	1954	Associated State of French Union
ation of Malaya*.....	1957	British Protected States
ic Republic of Pakistan*.....	1956	British Dominion
ocratic Republic of Vietnam		
orth).....	1954	Associated State of French Union
blic of Vietnam (South).....	1954	Associated State of French Union

ember of the French Community. * Member of the British Commonwealth. †† Relation to France not re
at time we went to press.

WORLD HISTORY

Countries, Territories, Dependencies

Afghanistan (Kingdom)

a: 250,966 square miles.
ulation (est. 1954): 12,615,146
tu, 60.5%; Tajik, 30.7%; Uzbek, 5%;
ollan and others, 3.8%).
asity per square mile: 50.2.
er: Mohammed Zahir Shah.
ne Minister: Ali Mohammed Daud.
ncipal cities (est. 1954): Kabul, 209,-
capital); Kandahar, 60,000 (trading
r); Herat, 50,000 (farming center).
etary unit: Afghani.
guages: Pashto (official), Persian.
igion: Mohammedan (Sunni, 90%;
, 10%).

STATUS IN THE WORLD TODAY

hanistan has adopted a policy of
ality, or neutralism, in the current
West struggle largely as a result of
ollowing factors: its history as an
for many years of Anglo-Russian
alist rivalry; its landlocked posi-
its 1,250-mile frontier with the
R.; and its border troubles with
an, the country's best and least
sive trade route with the rest of
world. Like other underdeveloped
nations, it has been using both
an and Soviet assistance in its
nic development program aimed at
up some of the power, transport,
ion, and industrial sources it so
needs. Latest estimates indicate
Afghanistan has received the equiv-
of \$161 million in loans and credits
the U.S.S.R., including \$25 million
ilitary aid, as against \$59 million in
and loans from the U.S.

of the nation's principal problems
nsportation over extremely difficult
s. There are few roads and usable
ways. The exit route through Iran

is the least useful and most expensive;
that through the Soviet Union depends
upon political accommodation. Twice in
recent years—in 1950 and 1955—Pakistan
has blocked its neighbor's transit to the
sea because of a conflict over the border
region of "Pushtunistan," the home of
the Pathans. But in 1958 the two coun-
tries signed a Transit Agreement, and a
U.S. loan to Pakistan will enable that
nation to complete railroad lines to the
Afghan border and the latter to connect
with them. The U.S.S.R. took advantage
of the 1950 dispute to sign a far-reaching
trade agreement with Afghanistan and
since then has intensified its efforts at
penetration of the country, which has re-
ceived \$70 millions in military aid, includ-
ing 60 jet fighters and 12 bombers from
Russia.

HISTORY AND GOVERNMENT. Wedged
among Pakistan, Iran, and the U.S.S.R. in
southwestern Asia without outlet to the
sea, Afghanistan did not become an in-
dependent state until 1747. Previously, it had
been either a cluster of small states under
nominal Arab rule, part of Mongol or Mo-
gul empires, or dismembered among India,
Persia, and the Uzbeks.

In 1880, Great Britain recognized Ab-
dur Rahman Khan as Emir and gave him
an annual subsidy of more than \$500,000
to delegate management of his foreign
relations to Britain.

On Aug. 8, 1919, a treaty was signed
making Afghanistan free and independent
of all British control. The country main-
tained strict neutrality in World War II,
and was admitted to the U.N. in 1946.

Under the Constitution, promulgated in
1932, authority is vested in the sovereign
and Parliament, which has a Senate of fifty

members, who are named for life by the sovereign, and a National Assembly of 171 elected members. Executive power is exercised by the sovereign and Cabinet, headed by the Prime Minister.

ECONOMIC CONDITIONS. Only a fifth of the soil is under cultivation, the greater part of the country being mountainous and rocky. Farming is confined to the fertile valleys and plains, sometimes with the aid of irrigation. Two crops a year are usually grown. Important ones include fruits and nuts, castor beans, cereals, madder, tobacco, cotton and vegetables. Wheat is the staple food. The fat-tailed indigenous sheep is a principal source of meat and wearing apparel.

Industry is still in a primary stage of development. Manufactures include cotton and woolen textiles and clothing, soap, leather, matches, beet sugar and furniture.

Among the leading exports are karakul skins (mostly to the U.S.), cotton, wool, rugs, carpets, spices and dried fruits. Most of the trade normally is carried on through Pakistan; wool and cotton are exported to the U.S.S.R. in return for consumers' goods. Fifty per cent of foreign trade is with the U.S.S.R. In addition exports go to India, U.S., Great Britain and Poland.

Afghanistan has no railways or navigable streams. Camels and pack horses are still used by the natives.

Both mineral and forest resources are largely unexploited. There are deposits of beryllium, chromite, coal, copper, gold, iron ore, lapis lazuli, oil, silver and sulfur.

NATURAL FEATURES. Afghanistan, approximately the size of Texas, is split east to west by the Hindu Kush range of the Himalayas, rising in the east to heights of 24,000 feet. Except in the southwest, most of the country is covered by high snow-capped mountains and deep valleys.

Albania (People's Republic) (Republika Popullore e Shqipërisë)

Area: 11,100 square miles.

Population (1958): 1,507,000 (Albanian 99.8%; others, .2%).

Density per square mile: 135.8.

Chairman of Presidium: Hadji Leshi.

Premier: Mehmet Shehu

Principal cities (est. 1955): Tirana, 108,183 (capital); (est. 1945) Scutari, 33,825 (northern trading center); Koritsa, 24,035 (farming center).

Monetary unit: Lek.

Language: Albanian.

Religions (est. 1953): Moslem, 65%; Greek Orthodox, 23%; Roman Catholic, 11%; others, 1%.

STATUS IN THE WORLD TODAY

Albania, a backward and mountainous country, is the Kremlin's sole and isolated

outpost on the Mediterranean, accessible only by a circuitous sea route since defection of Yugoslavia from the Comform. While it is reported to shelter marine pens for the Soviet navy, its port facilities are generally inadequate for modern shipping, and its principal role is that of a gadfly pestering Marshal Tito, dissident, yet Communist, country. Soviet agents can slip across the common frontier in either direction, and propaganda attacks can be mounted against Yugoslavia in the name of the largely illiterate Albanian mountain folk. Albania played a similar role in the late 1940's, when Greek Communist rebels were engaged in a war against the Athens government. Until the 1948 break between Tito and Moscow, the Albanian Labor (Communist) party was directly subordinate to the Yugoslav Communist party. It is now controlled by the Russians, and the country is the smallest and least significant of the European satellites.

HISTORY AND GOVERNMENT. After the fall of the Roman Empire, Albania became part of the Byzantine Empire and was successively invaded by Goths, Serbs, and Bulgarians. From 1014 to 1204 it was again under Byzantine rule. An alliance of Albanian chieftains (1444-66) under Skanderbeg failed to halt the advance of the Turks, and the country remained under nominal Turkish rule for more than four centuries, until it proclaimed its independence on Nov. 28, 1912.

During World War I Albania was successively occupied by Italian, Greek, French, Serb and Austro-Bulgarian forces. On Jan. 2, 1920, Italy recognized Albanian independence and evacuated the country. In 1927, after concluding pacts with France, Italy placed Albania in Italy's sphere of influence, Zogu, President of the new Albanian republic since 1925, proclaimed himself King Zog I.

During the Greco-Italian war of 1940-41, the Greek armies pushed the Italians back from the Albanian border and occupied a large part of southern Albania. When Germany attacked Greece and Yugoslavia in April, 1941, however, the Greeks withdrew quickly, and the Axis occupation of Albania was complete.

Albania was free of the Axis yoke at the end of 1944, and a leftist provisional government under Colonel General Enver Hoxha was established.

Under its 1945 Constitution, Albania is a typical Soviet government. Supreme power is vested in the popularly elected National Assembly, to which the Cabinet, headed by the Premier, is responsible.

ECONOMIC CONDITIONS. Albania is a primitive country where each is

to provide most of its own needs. The whole population is engaged in combined farming and stock raising. A small portion of the central part is for tilling. Corn is the chief crop. Cereals are wheat, tobacco, oats, barley, rye, olives, and citrus fruit. Factories produce food products, cement and textiles; a large dam and power station was completed near Tirana in 1950.

Albania's postwar trade has been limited to the most part to the Soviet bloc. Important exports include crude oil, copper and chrome ore. In 1959 Russia extended a loan of 300 million rubles and agreed to furnish technical aid to Albanian industry. The country is relatively unexploited. The principal mineral is petroleum. Others include coal, bitumen, bauxite, chromite, coprolignite, and pyrites.

PHYSICAL FEATURES. Albania is a mountainous state, largely over 3,000 ft. above sea level, with a narrow, marshy coastal strip crossed by several rivers. The interior is mountain plateaus and basins containing the centers of population.

Andorra

Andorra is a 191-square-mile autonomous and independent state on the Franco-Spanish border has been under the joint suzerainty of the French state and the Spanish bishops of Urgel since 1278. It is a country of mountain valleys inhabited by about 6,000 hardy and traditionally independent people, whose principal pursuit is the tending of flocks. Catalan is the language spoken. A Council General of 24 members, elected for four years by the heads of families, choose the First Syndic, the supreme executive authority.

Arabia

POLITICAL DIVISIONS OF ARABIA

Name	Area (sq. mi.)	Population
(Colony, British)	75	152,000 ¹
(Protectorate ²)	112,000	650,000 ¹
in Islands		
Emirate	231	125,000 ¹
Emirate (Sheikdom)	8,000	240,000
and Masqat		
Emirate	82,000	550,000 ³
Emirate (Sheikdom)	8,500	30,000 ³
Arabia		
Kingdom	617,760	6,036,000 ¹
Coast (Sheikdom)		
Emirate	32,278	80,000 ¹
Emirate (Kingdom)	75,290	4,500,000 ⁴

¹ Estimated. ² British protectorate. ³ 1957 estimate. ⁴ 1953 estimate

Arabian peninsula is at the southern extremity of Asia. Its rich oil deposits

and proximity to Palestine gave it special importance after World War II. Once a political unit, today it consists of the kingdoms of Saudi Arabia and Yemen, the British colony of Aden and six political entities in special treaty relationship with Great Britain.

The peninsula, with an area more than three times that of Texas, and an extreme length of 1,400 miles, is generally a plateau sloping gently eastward from a mountain range that averages 5,000 feet in elevation and runs along its entire west side within ten or fifteen miles of the Red Sea. The range reaches a maximum of 12,336 feet in Yemen to the southwest. Arabia has no rivers and no forests and is principally a desert dotted with many oases.

Mohammed united all Arabs in the seventh century A.D., and his followers, led by the caliphs, founded a great empire with its capital at Medina. Later, the caliphate capital was transferred to Damascus and then Baghdad, but Arabia retained its importance because of the holy cities of Mecca and Medina. In the sixteenth and seventeenth centuries, the Turks established at least nominal rule over much of Arabia, and in the middle of the eighteenth century it was divided into separate principalities.

Through agreements with local rulers, the British extended their rule over the southern and eastern coasts in the nineteenth century. At the same time, the Wahhabs, a religious sect advocating strict adherence to Mohammed's teachings, gained control over the greater part of central and eastern Arabia, and their work was the beginning of the present Saudi Arabia.

Aden. See page 159.

Bahrein Islands (Sheikdom)

These islands form an archipelago off Arabia's east coast and are an independent state ruled by Sheik Sir Salman bin Hamad al Khalifah. The islands are the center of the Persian Gulf pearl fisheries and the site of an airport on the London-Australia route. The concession for exploitation of petroleum deposits, discovered in 1932, is held in equal proportion by the Standard Oil Co. of California and the Texas Co. Output in 1957 was 1,596,000 metric tons. Agriculture is of some importance. Most of the trade of the Saudi Arabian provinces of Nejd and Hasa pass through Bahrein. The capital is Manama (population 1957: 53,000).

Kuwait (Sheikdom)

Kuwait, on the northwestern shore of the Persian Gulf, is an independent state ruled by Sheik Abdullah as-Salim as-Subah. British protection, first exercised in 1898,

has several times prevented it from being absorbed by Saudi Arabia. The territory surrounding Al Kuwait, its port, is largely desert; its trade consists of exchanging Arab goods from the interior for textiles, rice, sugar, and other necessities. Kuwait's petroleum reserves, estimated at 60 billion barrels, are under concession to the Kuwait Oil Co., Ltd. (owned jointly by Gulf Oil Corp. and British Petroleum Co., Ltd.), which pays one-half its profits to the Sheik. Production, which began only in 1945, totaled 60,612,000 metric tons in 1957. Production is concentrated at the Burgan field, from which petroleum is piped to the new port of Ahmadi for shipment.

South of Kuwait on the Persian Gulf is the Saudi Arabian-Kuwait neutral zone, which under the Treaty of Uqair (1922) belongs in undivided one-half interest to Kuwait and Saudi Arabia. It consists of about 2,000 sq. mi. of uninhabited desert. Oil was discovered in 1953 by American Independent Oil Co. Production totaled 11,724,585 barrels in 1956.

Oman and Masqat (Sultanate)

Occupying the mountainous southeastern part of the peninsula, Oman is nominally an independent state under the rule of Sultan Said bin Taimur. It has been under British protection since the nineteenth century. The state is best known for its date cultivation, and its riding camels are considered the best in the world. Trade is mainly to and from India. The capital is Masqat (population 1954: 5,500).

Qatar (Sheikhdom)

Qatar occupies the whole of the Qatar peninsula in the Persian Gulf. It is ruled, under British protection, by Sheik Ahmed bin Ali bin Abdullah al Thani. The whole area is claimed by Saudi Arabia. Oil deposits are being exploited by a subsidiary of the Iraq Petroleum Co.; output in 1957 was about 6,612,000 metric tons.

Saudi Arabia. See page 254.

Trucial Coast (Sheikhdoms)

This area, extending along part of the Gulf of Oman and the southern coast of the Persian Gulf, is ruled by seven semi-independent sheiks. Treaties signed with Britain in 1853 and 1892 provided that the sheiks should not cede or sell any part of their land to any other power.

Yemen. See page 274.

Argentina (Republic)

(República Argentina)

Area: 1,084,359 square miles.

Population (est. 1959): 20,614,000 (approximately 97% of European descent,

chiefly Spanish and Italian; 3% Indians and other).

Density per square mile: 19.

President: Arturo Frondizi.

Principal cities (est. 1958): Buenos Aires, 3,799,200 (capital and chief port); (1956) Rosario, 550,000 (flour milling); Córdoba, 454,800 (northwest farming center); Avellaneda, 346,600 (industrial suburb of Buenos Aires); Lanús, 286,400 (suburb of Buenos Aires); La Plata, 249,600 (seat of meat packing).

Monetary unit: Peso.

Languages: Spanish (official), Italian.

Religions (census 1947): Roman Catholic, 92.7%; Protestant, 1.9%; Jewish, 1.1%; others and unknown, 3.8%.

STATUS IN THE WORLD TODAY

Argentina's problems since the overthrow of Juan Perón and the inauguration of a constitutional President in May, 1958, have been primarily economic and are largely to the mistaken economic policy of the recent dictator. They are threefold: labor, decapitalization, and a strongly unfavorable balance of payments.

Since Perón, for political reasons, made the labor movement his movement and given it many concessions at the expense of other economic units in the nation, its attitude toward the new government of Dr. Arturo Frondizi at first was in doubt. One of his first moves was to decree a general wage increase for wage and salary earners. Even so, there have been a number of conflicts since between labor and the government, and militant strikes. There is still considerable Peronista strength in the country.

The capital equipment of much of Argentina's economy, particularly in the field of transportation, is out of date. Agriculture, upon which Argentina depends for most of its foreign-exchange earnings, is underequipped with implements and machinery. Much of the equipment for manufacturing industry is inadequate.

Increasing exports and decreasing capital imports are two ways of reducing the country's unfavorable balance of trade, which recently has been about \$300 million a year. But increased domestic consumption and a decline in the nation's output have reduced the agricultural products available for export. The Frondizi government hopes to remedy this by expanding agricultural production for export through increased local production of agricultural machinery, distribution of modern technical information, and a shift from noncompetitive products such as wheat, corn and meat. The regime also hopes to reduce imports of petroleum, the last single import item. Here it is somewhat handicapped by a nationalistic opposition to exploitation of Argentina's admitted oil reserves by foreign companies.

ISTORY. Discovered in 1516 by Juan de Solís, Argentina developed slowly under Spanish colonial rule. Buenos Aires settled in 1580; the cattle industry thriving as early as 1600.

Invading British forces were expelled in 1807, and when Napoleon conquered Spain, the Argentinians set up their own government in the name of the Spanish king. On July 9, 1816, independence was formally declared.

The Rosas dictatorship (1835-52) only temporarily ended the strife between Buenos Aires and the rest of the country between adherents of a strong central government and states rights. Despite these national differences, however, the country prospered. Gradually the non-aristocratic classes began to demand more political rights and representative government, and social reforms were finally enacted in 1853.

President Hipólito Irigoyen (1916-22) refused to abandon Argentinian neutrality during World War I. Re-elected in 1928, Irigoyen, a radical, was ousted two years later by a conservative revolution led by General José Uriburu. The latter's successor, General Agustín Justo (1932-38) followed a moderate policy and undertook a large public-works program.

Argentina proclaimed neutrality at the outbreak of World War II, but in general participated in hemispheric defense projects. In the closing months of the war, Argentina declared war on the Axis powers (Sept. 27, 1945) and signed the Act of Bataan the following April 4. Diplomatic recognition and admission to the United Nations followed. Juan D. Perón, then an army officer, emerged as strongman and won the 1946 presidential elections. Perón was re-elected in 1951.

Long-smouldering opposition, fanned by changing relations with the Catholic Church, finally resulted in Perón's overthrow in Sept., 1955 in a coup led by the armed forces. Perón fled to exile and his government as well as Congress was dissolved.

GOVERNMENT. Argentina is a federal republic of 22 provinces and the federal district. Under the Constitution of 1853 (revised by decree on May 1, 1956), the President and Vice-President are elected for 6 years by electors who are chosen by direct vote. The President appoints his cabinet. The Vice-President presides over the Senate but has no other powers. The President is eligible for immediate re-election. The Congress has two houses—a 46-member Senate, elected by the provincial legislatures for 6-year terms, and a Chamber of Deputies, popularly elected for 6-year terms. One-third of each house is re-elected every two years.

Each province has its own constitution,

elected governor, legislature and judiciary, but the President may in a crisis take over the local government.

ECONOMIC CONDITIONS.

Agriculture. A farming and stock-raising nation, Argentina devotes some 40% of its area to pasture and 10% to cultivation. Cotton, sugar cane and fruits are important, and Argentina is the world's largest producer of yerba maté (Paraguay tea), the national beverage. The 1956 wine production (preliminary) was 354,300,000 gallons (1951-55 average: 412,000,000 gallons).

Cattle raising predominates on the pampas, especially in Buenos Aires province. Sheep raising is more important in Patagonia. In 1957 there were 44,203,425 cattle, 45,737,860 sheep, 3,487,122 pigs, 5,482,453 horses. Wool production in 1958-59 was 190,800 metric tons, greasy basis.

Manufacturing. Industrial expansion was accelerated during World War II by the shortage of imports, but industry is still closely allied to agriculture. The principal industry is meat packing, followed by flour milling, textiles, sugar refining, dairy products, quebracho extraction and wine. Jeep production was started in 1956 and a steel plant is under construction at San Nicolas.

Trade. Leading exports in 1958 were meat (30%), cereals and linseed (26%), wheat (16%), wool (10%), and hides (6%); leading imports, machinery and vehicles (24%), fuel and lubricants (20%), and iron and steel and manufactures (18%). Leading customers were the United Kingdom (24%), the U. S. (13%), Germany (10%), the Netherlands (10%), and Italy (8%); leading suppliers, the U. S. (16%), Brazil (10%), Venezuela (8%), the United Kingdom (8%), and West Germany (9%).

NATURAL FEATURES AND RESOURCES.

Second in South America to Brazil in size and population, Argentina is a plain, rising from the Atlantic to the Chilean border and the towering Andes peaks, including Aconcagua, 22,835 feet, the highest peak in the world outside Asia. The northern area is the swampy and partly wooded Gran Chaco. South of that are the rolling, fertile pampas, rich for agriculture and grazing and supporting most of Argentina's population. Next southward is Patagonia, a region of cool, arid steppes with some wooded and fertile sections. The eastern part of Tierra del Fuego, the island southern tip of South America, belongs to Argentina.

The three great rivers which make up the Plata system—the Paraná, Paraguay and Uruguay—are important commercial arteries in northern Argentina. Rosario and Santa Fé, 260 and 360 miles respectively above Buenos Aires on the Paraná, are accessible to ocean vessels.

Minerals. Argentina must import most of nearly every mineral it uses. Oil is produced in Patagonia (1957: 4,860,000 metric tons). The government announced discovery of uranium deposits in Feb., 1947. Imports of fuels and lubricants totaled 9,993,900 metric tons in 1956.

Forests. The Gran Chaco area is the world's chief source of quebracho extract. Total exports of this tanning agent obtained from quebracho logs in 1954 were 153,000 metric tons, part of which was re-exported from Paraguay.

Austria (Republic)

(Republik Österreich)

Area: 32,374 square miles.

Population (est. 1958): 7,021,000 (practically all Austrian).

Density per square mile: 216.9.

President: Dr. Adolf Schärf.

Chancellor: Julius Raab.

Principal cities (est. 1959): Vienna, 1,652,427 (capital, industrial center); Graz, 226,453 (industrial center); Linz, 184,685 (industrial center); Salzburg, 102,927 (tourist center); Innsbruck, 95,055 (tourist center).

Monetary unit: Schilling.

Language: German.

Religions (census 1951): Roman Catholic, 89%; Protestant, 6%; others, 5%.

STATUS IN THE WORLD TODAY

Although theoretically neutral in the cold war, Austria, with its democratic institutions, is oriented toward Free Europe. Its foreign policy, dictated by its central European location, aims to avoid accusations of favoritism for either East or West. But public opinion appears to be pro-Free Europe and pro-American, and there is much resentment against the severe economic concessions exacted by the U.S.S.R. as the price of its withdrawal in 1955.

Stripped of her industrial areas after World War I, with no outlet to the sea, with a soft currency, and a population less than that of metropolitan New York, Austria has long been dependent upon outside aid. Her economic recovery in recent years has been one of the most dramatic success stories of the post-World-War II era. Much of this may be attributed to Marshall Plan aid.

HISTORY AND GOVERNMENT. The history of Austria before World War I was closely identified with that of the Austro-Hungarian Monarchy and its ruling house, the Hapsburgs. The monarchy originated in a margravate founded by Charlemagne in the late eighth century. In 1252 Ottokar, King of Bohemia, gained possession of the Austrian territories, only

to lose them to Rudolf of Hapsburg 1276. In the next three centuries the Hapsburg power steadily grew until Charles V (1519-1556) ruled a vast area of Europe. In 1806, during the Napoleonic Wars, Emperor Francis I relinquished the crown of the Holy Roman Empire.

Austria emerged from the Congress of Vienna in 1815 as the dominant power on the Continent. The *Ausgleich* of 1867 provided for a dual sovereignty embracing the empire of Austria and the kingdom of Hungary under Francis Joseph I, who ruled until 1916.

In 1919 the Austro-Hungarian Monarchy was dissolved by the treaties of St. Germain and Trianon. Austria was left in political chaos and economic ruin. In 1934 Chancellor Engelbert Dollfuss established a dictatorship, only to be assassinated by Nazi conspirators on July 25, 1934. He was succeeded by Kurt von Schuschnigg, whose futile effort to maintain Austrian independence ended with a bloodless occupation on March 12, 1938. The next day, *Anschluss* (union) with Germany was proclaimed. After World War II the United States and Great Britain removed Austria from the ranks of enemy states by declaring the Austrians a "liberated" people. She finally regained her independence on May 14, 1955, by a state treaty ending seventeen years of occupation, but only after long and difficult negotiations with the Russians.

The federal republic of Austria is composed of nine provinces, including Vienna. The President is elected by the people directly for a term of six years. The bicameral legislature consists of the *Bundesversammlung* with fifty members chosen by the provincial assemblies, and the *Nationalrat*, with 165 members popularly elected for 4 years. The Chancellor and his Cabinet are responsible for governmental administration. **ECONOMIC CONDITIONS.** Agriculture employs approximately one-third of the population but the country is heavily dependent on imported foodstuffs. Stock farming predominates. Rye and wheat are the leading cereals. Stock raising and dairy farming, both in the Alpine pastures and the lowlands of the east, are of importance.

Austria is primarily an industrial country, with 41% of the population engaged in industry. Most important are the metallurgical, engineering, textile and food processing industries. Medium- and small-sized firms with specialized lines predominate, although a few large enterprises exist. Nationalized plants employ about one-third of the industrial labor force. The steel and aluminum plants are in Upper Austria.

Leading exports are iron and steel, other metals, timber and machinery,

equipment and vehicles; leading imports, machinery, electrical equipment and ores, food and mineral fuels. Leading exporters in 1958 were West Germany (16%), Italy (17%), other EPU Countries (15%), and the sterling area (8%); leading suppliers, West Germany (39%), the United States (11%), Italy (8%), other countries (15%), and the United Kingdom (4%). Austria joined "Outer Area" in 1959 to encourage free trade in the area.

PHYSICAL FEATURES AND RESOURCES. Belgium covers an area about equal to that of Scotland and includes much of the mountainous territory of the eastern part (about 92.3 per cent of the country). The country contains many snowfields, rivers, and snow-capped peaks. The principal river is the Danube. Forests and agricultural lands cover about 40%.

Belgium possesses valuable mineral resources. In Styria lies one of the largest iron deposits of iron ore. Copper is found in Salzburg, Tyrol, and Lower Austria and lead and zinc in Carinthia. Large quantities of coal and coke must be imported, but extensive water power resources are available for exploitation. Petroleum fields are in the Zistersdorf and Vienna areas, both in eastern Austria.

Belgium (Kingdom)

(Royaume de Belgique—
Koninkrijk België)

Area: 11,779 square miles.*
Population (est. Dec. 31, 1958): 9,053,000 (Flemish).
Density per square mile: 768.6.
Sovereign: Baudouin I.
Prime Minister: Gaston Eyskens.
Principal cities (est. 1957, including suburbs): Brussels, 1,385,831 (capital); Antwerp, 841,686 (port and commercial center); Liège, 604,861 (iron and steel); Charleroi, 469,383 (industrial center); Ghent, 453,234 (textiles).
Official language: Belgian French.
Languages (est. 1954): Flemish, 50%; French, 34%; Dutch, 15%; German, 1%.
Religion: Predominantly Roman Catholic.

Territories taken over from Germany in 1949.

STATUS IN THE WORLD TODAY

Belgium, a staunch supporter of the Free World, probably makes a proportional contribution to the North Atlantic community second to none. As a nation, it has always been one of the most enthusiastic participants in international attempts to bring order into the world. It was first in the League of Nations and first in the United Nations. It has also

supported attempts to create supranational economic divisions, starting with the Benelux Customs Union which it established with the Netherlands and Luxembourg. Its economy is relatively stable, although it can supply only two-thirds of its food needs, has no natural resource except coal—which has become increasingly difficult to sell—and must export 40 per cent of its production. In competing with other nations for foreign trade, it is beginning to feel the effect of obsolescent equipment in some textile and chemical plants.

Riots early in 1959 against Europeans by Abako Congolese seeking independence focused attention on the Belgian Congo, where the Belgians have sought to rule with enlightenment. Voting rights were granted to all last year (until then, even white settlers could not vote), and on June 30, 1960, the colony received its independence.

HISTORY AND GOVERNMENT. Perhaps the earliest mention of the Belgians in history was in 57-50 B.C., when they were conquered by Julius Caesar. In the Middle Ages the Belgian towns became wealthy and virtually autonomous as great textile centers. Belgium became part of Burgundy in 1385 and, later, part of the Spanish domains of Charles V. By the Treaty of Utrecht, in 1713 Belgium went to Austria, though retaining its autonomy. During the wars that followed the French Revolution, Belgium was occupied and later annexed by France.

After the fall of Napoleon the Congress of Vienna (1815) joined the French Catholic Walloons of Belgium with the Germanic Protestant Flemings of Holland (United Provinces) to form the Kingdom of the Netherlands. The Belgians rose in revolt in 1830 and declared their independence. The Treaty of London (1831) guaranteed Belgian independence.

The invasion of Belgium by Germany in 1914 triggered the explosion of World War I. The Treaty of Versailles (1919) gave the strategic areas of Eupen, Malmédy, and Moresnet to Belgium. On February 17, 1934, King Albert was killed while mountain climbing and was succeeded by his son, Leopold III. Leopold III formally abdicated on July 16, 1951, and his son became King Baudouin.

Belgium is one of the most highly industrialized nations in Europe, due in part to its coal reserves. Its economic advance has been notable. In spring, 1958, the \$260 million Brussels World's Fair commenced a six-months run to portray the artifacts of today's technological revolution.

Belgium is a constitutional monarchy consisting of nine provinces. Its bicameral legislature has a Senate, with members

elected for four years, partly directly and partly indirectly, and a 212-member Chamber of Deputies directly elected for four years by proportional representation. There is universal suffrage, and those who do not vote are fined. Belgium joined the North Atlantic Alliance in April, 1949.

ECONOMIC CONDITIONS. *Agriculture.* About 60 per cent of the total area of Belgium is under cultivation, and one-half the farmed area is devoted to forage crops.

Other crops are fodder beets, flax and fruit. The pastoral industry, especially dairy farming, flourishes. On Jan. 1, 1957, Belgium had 2,254,924 cattle, 1,276,437 hogs, 175,003 horses, and 37,540 sheep.

Manufacturing. Industry chiefly processes imported raw materials for re-export in semifinished or finished form. Of primary importance are iron and steel, nonferrous metals, fabricated metal products and textiles. Associated with iron and steel is a considerable engineering industry, shipbuilding in Antwerp, and machinery and railway stock in Brussels. The centuries-old textile industry produces linen (Courtrai); cotton (the southeast); and synthetic fibers. Antwerp, using the output of mines in the Congo and Angola, rivals Amsterdam in diamond cutting.

Chief customers in 1958 for Belgium-Luxembourg were the Netherlands (21%), France (11%), West Germany (12%), the U.S. and Canada (10%), other EPU countries (14%), and Britain (6%). Leading sources of imports were West Germany (17%), the Netherlands (16%), the U.S. and Canada (14%), France (12%), other EPU countries (9%), and Britain (8%). Chief exports were iron and steel and products (28%), thread and fabric (7%), coal, coke, and petroleum and products (6%), copper and products (5%), and precious stones and metals (5%).

NATURAL FEATURES AND RESOURCES. The northern third of Belgium is a plain extending eastward from the coast of the North Sea. North of the Sambre-Meuse Rivers is a low plateau, varying from 250 to more than 600 feet in height, and to the south lies the Ardennes plateau, rising to a maximum of about 2,300 feet. The shallowness of the North Sea off Belgium precludes the development of good harbors; some of the port advantages of Antwerp, on the Schelde River, are offset by the fact that the approaches to it are through Dutch territory.

The principal mineral is coal. The Ardennes coalfield, now nearly exhausted, extends southward into France. The Campine field lies in the northeast.

RUANDA-URUNDI—Status: U. N. trust territory.

Area: 20,742 square miles.

Population (est. 1958): 4,700,000.

Capital: Usumbura.

Resident-General: Jean Paul Harro

Principal products: tin, coffee, gold, ton, hides.

Ruanda-Urundi, in east Africa, was signed to Belgium as a mandate by League of Nations at the end of WWI, before which it was a portion of German East Africa. The area, placed under U.N. trusteeship in Dec., 1946, is largely mountainous, with livestock grazing as principal native activity.

Bhutan (Kingdom)

Area: 19,305 square miles.

Population (est. 1959): 700,000 (mostly Bhotiya).

Density per square mile: 36.3.

Ruler: Maharaja Jigme Dorji Wangchuk.

Capital: Punakha.

Monetary unit: Indian rupee.

Language: Tibetan dialect.

Religion: Buddhism.

HISTORY. Bhutan is a semi-independent state lying on the southeast slope of the Himalayas, bordered on the north and east by Tibet and on the south and west by the Republic of India. The area is said to have been invaded and settled by Tibetan tribes in the 9th century A.D. After almost a century of conflict between the Bhutanese and the British in India, British troops invaded the country in 1865 and negotiated an agreement under which Britain undertakes to pay an annual allowance to Bhutan on condition of good behavior. A treaty signed with India in Aug. 1949 increased this subsidy and placed Bhutan's foreign affairs under Indian control.

Until 1907, Bhutan's government was under the dual control of the clergy and laity, but the country is now ruled by a hereditary Maharaja.

The dominant people are the Bhotiyas who are of Tibetan origin, speak a Tibetan dialect, and profess the same form of Buddhism as is prevalent in Tibet.

ECONOMIC CONDITIONS. The chief crops are rice, corn and millet; the fields, cut on hillside terraces, are watered by an ingenious system of irrigation. Bhutan is famous for its small though sturdy mountain ponies. The chief industries are weaving, cloth weaving and fine basket work, mat work. Trade is insignificant, and most of it is conducted by barter.

NATURAL FEATURES. The whole of Bhutan presents a succession of lofty rugged mountains running generally from north to south and separated by deep gorges. Mountains in the north reach a height of 24,000 feet.

Bolivia (Republic)

(República Boliviana)

Area: 424,162 square miles.
 Population (est. 1959): 3,316,000 (1950: 2,500,000; mestizo 32%, white 14.8%, Indians 53.3%).
 Density per square mile: 7.8.
 President: Victor Paz Estenssoro.
 Principal cities (est. 1957): La Paz, 179 (de facto capital); Cochabamba, 19 (commercial center); Oruro, 75,468 (mining); Potosí, 51,065 (mining); Sucre, 15 (legal capital).
 Monetary unit: Boliviano.
 Language: Spanish.
 Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

The wave of democracy which has swept South America in recent years has enabled the Bolivian Revolutionary Movement to stay in power since 1952 despite attempts at revolution, and an all-desperate economic situation. It has maintained its position because of the revolution it inaugurated by nationalizing the tin mines—minerals are the source of more than 90 per cent of its foreign exchange; giving the Indians the right to vote; and distributing land among landless farm workers who previously had to work for the large landowners in small plots just big enough for their own sustenance. Virtually all Indians have some land and are prospective owners of more. And with extensive aid from the U.S. Point Four program, the new government is giving them instruction on new and better methods of production and extending them credit.

While diversification of agriculture will offset the payments Bolivia must make to import much of its basic foodstuffs, the primary problem is still the country's dependence upon tin exports, which in turn depend upon the world price of tin metal. A world surplus of tin, the establishment of a quota system for tin production and the "dumping" of tin on the world market by the Soviet Union at low prices have hurt Bolivia. And tin miners have been frozen in their uneconomic mines have not been closed and workers have been given subsidies in the form of fixed prices at companies during inflation, the nationalized tin mines have been run at a deficit and the government has been forced to seek aid from the United States and the International Monetary Fund. One bright spot in the otherwise bleak economic picture has been the successful exploitation of petroleum deposits which has converted the country from a heavy importer of petroleum products to an exporter.

FACTS. Famous since Spanish colonial times for its mineral wealth, modern Bo-

livia was once a part of the ancient Inca Empire. After the Spaniards had defeated the Incas during the first part of the 16th century, Bolivia was subjected to the Spanish Viceroyalty of Peru, and its predominantly Indian population was reduced to slavery. The country finally won its independence in 1825; the new republic was named after Simón Bolívar, South America's famed liberator.

Bolivia's political history since independence has been extremely stormy. Since 1825 it has had more than 60 revolutions, 70 Presidents and 11 Constitutions. No elected President has served out his term.

Harassed by internal strife, Bolivia lost great slices of territory to three neighboring nations. Several thousand square miles and its outlet to the Pacific were taken by Chile after a disastrous war in 1879-83. In 1903 a piece of Bolivia's Acre province, rich in rubber, was ceded to Brazil. And in 1938, after a war with Paraguay, Bolivia gave up claim to nearly 100,000 square miles of the Gran Chaco.

GOVERNMENT. Bolivia is a republic, electing by popular vote a President every four years, a 27-member Senate every six years, and a 110-member Chamber of Deputies every four years. The President appoints the members of his Cabinet. The Indian majority was virtually disfranchised until July, 1952, when the franchise was conferred on all those who had reached the age of 20, whether literate or illiterate.

ECONOMIC CONDITIONS. Production of such basic foodstuffs as wheat and rice is insufficient for domestic needs, and considerable quantities must be imported. Cattle are raised in the more temperate regions of the east and south, sheep in the departments of La Paz and Cochabamba, and llamas, alpacas, and vicuñas, important sources of hides, wool and, meat, are raised on the plateaus by Indians. The furbearing chinchilla, a native of the colder plateau regions, is also raised in Bolivia.

Tin and other minerals comprise almost the whole of Bolivia's exports. Since the country is landlocked, foreign trade must pass through free ports in Chile and river ports on the Amazon.

Chief exports in 1958 were tin (58%), lead (9%), tungsten (7%), zinc (5%), silver (8%) and petroleum and products (8%). Leading customers in 1957 were the United Kingdom (59%) and the U.S. (35%); leading suppliers, the U.S. (46%), Argentina (15%), Germany (9%), and the United Kingdom (6%). The U.S. has supplied \$137 millions of economic aid.

NATURAL FEATURES AND RESOURCES. Landlocked Bolivia is a low alluvial plain throughout 60 per cent of its area toward the east, drained by the Amazon

and Plata river systems. The western part, enclosed by two chains of the Andes, is a great plateau—the Altiplano, with an average altitude of 12,000 feet. More than 80 per cent of the population lives on the plateau, which also contains La Paz, the highest capital city in the world. Lake Titicaca, half the size of Lake Ontario, is one of the highest large lakes in the world, at an altitude of 12,507 feet. Islands in the lake hold ruins of the ancient Incan civilization.

Mining is the backbone of the economy. Tin, accounting normally for about 70 per cent of Bolivian exports, is by far the most important mineral, most of it coming from Potosí and Oruro. During World War II, Bolivia was the world's largest tin producer.

Brazil (Republic)

(Estados Unidos do Brasil)

Area: 3,287,195 square miles.

Population (est. 1959): 64,216,000 (1950: white, 61.7%; mestizo, 26.5%; Negro, 11.0%; other, 0.8%).

Density per square mile: 19.5.

President: Juscelino Kubitschek de Oliveira. President-elect Janio Quadros to take office Jan. 31, 1961.

Principal cities (est. 1958): São Paulo 3,315,553 (coffee and industrial center); Rio de Janeiro, 3,030,619 (chief port); Recife (Pernambuco), 733,870 (seaport); Salvador (Baía), 551,525 (seaport); Porto Alegre, 532,624 (seaport); Belo Horizonte, 527,270 (mining); Fortaleza (Ceará), 300,000 (seaport); Brasília (capital).

Monetary unit: Cruzeiro.

Language: Portuguese.

Religion: Roman Catholic, 95%.

STATUS IN THE WORLD TODAY

Brazil's principal problem currently is economic, even though it is potentially one of the richest nations in the Western Hemisphere. After four centuries as an almost exclusively agricultural country, with only one export crop—coffee—it is now trying hard to industrialize itself. It is plagued by a constantly rising cost of living which has caused mounting discontent. One of its weaknesses is oil—it produces only one-fifth of its requirements through a state monopoly which does not permit participation of foreign or internal private capital. Consequently, the government seeks public funds abroad rather than private capital to develop this industry and for that reason has not met with any great success in obtaining foreign investments. It has also been loath to institute reforms which would curb inflation as a prerequisite to obtaining a loan from the International Monetary Fund to close the gap in the balance of

payments. As a temporary measure, United States has agreed to let Brazil postpone payments which are due on debts. In the meantime, ultra-nationalists are blaming the United States for the high cost of living and are demanding nationalization of some American industries. These circles also make much of the argument that the United States gives far too little financial assistance to countries in the hemisphere in comparison with amounts allotted to countries in Europe, Asia, and Africa. Brazil has a number of military agreements with the United States, including one for the use of islands as a tracking station for guided missiles.

HISTORY. Brazil, the only Latin American nation deriving its culture and language from Portugal, is the largest country in South America, covering nearly half the continent. In the world, it ranks after the U.S.S.R., China, Canada and the U.S.

Brazil was discovered in 1500 by a Portuguese admiral, Pedro Álvares Cabral. Portugal began colonization in 1532. Brazil became a royal colony in 1549.

During the Napoleonic wars, the Portuguese Regent of Portugal (later King John VI) fled his country in advance of the French armies, and set up his royal court at Rio de Janeiro in 1808. When John was driven home by a revolution in 1820, the Brazilians rebelled at resuming colonial status and declared their independence in 1822 under Pedro, son of John VI. Pedro abdicated in 1831 in favor of his five-year-old son, who became Emperor in 1841 as Pedro II.

Although a popular monarch, Pedro II was forced to abdicate in 1889 following a military revolt, after which a republic was set up.

The President during World War I, Wenceslau Braz, co-operated with the Allies and declared war on Germany Oct. 1917. Pres. Washington Luiz Pereira de Souza, 1926–30, had to cope with the world depression and was overthrown by a revolutionary group under Getúlio Vargas, who took over as provisional President.

GOVERNMENT. Under the Constitution of 1946, Brazil is a union of twenty states, five territories and one federal district. The President is popularly elected for a five-year term and may not succeed himself. The national Congress is composed of two houses—the Senate, whose members are elected for eight-year terms, and the Chamber of Deputies, elected for four-year terms. Members of Congress are elected by a direct, compulsory and secret suffrage under proportional representation.

ECONOMIC CONDITIONS. *Agriculture.* Agriculture is a mainstay of Brazil's economy but only 4 per cent of its area is in cultivation, the rest being grazeland, forest, or non-productive land. Brazil leads the world in production of coffee and castor beans, and ranks second in rubber. Production and export of both coffee and cacao are government-controlled. Coffee production in the 1957-58 season totaled 24,000,000 bags of 132 lb each.

Livestock is raised nearly everywhere, with the great centers in the central and southern states. On Dec. 31, 1957, there were 14,190,000 hogs, 20,164,000 sheep, and 1,000,000 cattle.

Leading exports in 1958 were coffee (4%), pine wood (4%), cacao (7%), iron ore (3%), and cotton (3%). Leading customers were the U.S. (43%), Argentina (6%), Germany (6%), U.K. (4%) and the Netherlands (4%); leading suppliers, the U.S. (36%), Germany (10%), Venezuela (7%), Argentina (7%), and the Netherlands (5%).

Imports include machinery, Argentine wheat, vehicles, and petroleum products.

PHYSICAL FEATURES AND RESOURCES. Brazil covers about three-sevenths of South America, extends 2,965 miles north-south, 2,691 miles east-west, and borders

every South American state except Chile and Ecuador.

More than a third of Brazil is drained by the Amazon and its more than 200 tributaries. The Amazon is navigable for ocean steamers to Iquitos, Peru, 2,300 miles upstream. Southern Brazil is drained by the Plata system—the Paraguay, Uruguay and Paraná Rivers. The most important stream entirely within Brazil is the São Francisco, navigable for a thousand miles but broken near its mouth by the 260-foot Paulo Afonso Falls, with estimated potential of 1,000,000 horsepower.

Mineral Resources. Brazil's vast mineral resources are among her least developed assets. The most important are coal (estimated reserves of 5,000,000,000 tons; estimated 1957 production, 2,116,000 metric tons) and iron ore (metal content 65%), found mainly in Minas Gerais (1957 output, 3,536,728 metric tons). Other important minerals are gold (1956), 122,234 troy oz.; manganese ore (1957), 798,067 tons; petroleum (1957), 10,106,000 barrels; diamonds; silver; quartz crystals; uranium.

Forests and Fisheries. The largest single forest commodities are timber, chiefly pine from the southern states, and the wax of the carnauba palm, used for insulation and phonograph records and produced commercially only in Brazil (exports 1957: 11,976 metric tons).

BRITISH COMMONWEALTH OF NATIONS

EUROPE

United Kingdom of Great Britain and Northern Ireland

Area: 93,895 square miles (excluding Channel Islands and Isle of Man).
Population (est. 1959): 51,985,000 (England, Scotland, Welsh, Irish).
Density per square mile: 553.7.
Monarch: Queen Elizabeth II.
Prime Minister: Harold Macmillan.
Principal cities (census 1951): London (8,346,137 (capital)); Birmingham, 1,112,340 (iron and steel); Glasgow, 1,055,000 (seaport, shipbuilding); Liverpool, 89,532 (seaport); Manchester, 703,000 (textiles); Sheffield, 512,834 (steel, engineering); Leeds, 504,954 (clothing); Edinburgh, 466,770 (capital, Scotland).
Currency: Pound sterling (£).
Languages: English, Welsh, Gaelic.
Religion: Church of England (established); Church of Wales (disestablished); Church of Scotland (established—Presbyterian); Church of Ireland (established); Roman Catholic; Methodist; Congregational; Baptist; Jewish.

STATUS IN THE WORLD TODAY

Although Britain's interests are still worldwide and do not everywhere coincide with those of the United States—recognition of Red China and the attack on Suez, to name two instances—the American alliance is a cornerstone of British policy, as axiomatic with Labor as it is with the Conservatives. The alliance is dedicated to the winning of the cold war—and any "hot" war, if necessary—and to bringing freedom to the nations oppressed by Communist or other dictatorships. It is in the means of accomplishing these objectives that the two partners occasionally differ.

Being a great power is an expensive business, and Britain at times finds it difficult to maintain its status financially. There are many who argue that Britain should let its American partner carry the burden of expensive nuclear armaments rather than duplicating the effort, since Britain would be unlikely ever to be engaged in a nuclear war except at Amer-

ca's side. This would allow the United Kingdom to concentrate on mobile conventional forces, which are what she really will need for the small, regular, and far-flung operations likely to fall to her lot.

So Britain's defense, though seen as geared to America's under NATO, is also still conceived independently. Bases like Cyprus, Malta, Aden, Kenya, Singapore, and Hong Kong all make their claims on slender resources. It is a system wide open to the drain of constant small troubles which, once they arise, are fanned by the scouts of world communism. It is the requirements of small police operations and old-fashioned petty wars across the globe that many British feel must first be met.

In the field of diplomacy, too, there have been differences. It was Britain which maintained that a Foreign Ministers' conference in Geneva might be worthwhile when American opinion seemed disposed to regard such a meeting as fruitless unless a definite agenda could be agreed upon in advance. Yet when it came to negotiating with their adversaries, the British and Americans—and the French, too—presented a united front in offering counterproposals to Russia's demands that Berlin be abandoned by the West.

Economically, as Mr. Macmillan put it in 1957, most British people "have never had it so good." The working people in Britain enjoy almost full employment and most of them have larger pay envelopes than ever before. The gadgets of comfort—refrigerators, washing machines, automobiles, television sets—are almost as common in working-class as they are in middle-class families. On top of what wages will buy, there lie all the benefits of the Welfare State, which guarantees a livable minimum from the cradle to the grave.

But the Welfare State and the great-power status cost money, and to earn money Britain must export. She was able to get her export business going again after the war by large loans from the United States and by 1956 had doubled her pre-war volume of exports and raised the proportion of engineering goods to over half the total. She is concentrating on the development of new products and new industries—electronics, petrochemicals, plastics and synthetic fibers. It is the export of machines that pays best—the more scientifically advanced, the better. Let the successful export of manufactured goods fail, and everything fails. "Export or die" has been the slogan since the war.

HISTORY. Roman invasions of the first century B.C. brought Britain into contact with the continent. When the Roman legions withdrew in the fifth century A.D.,

Britain fell easy prey to the invading hordes of Angles, Saxons, and Jutes. Scandinavia and the Low Countries, and large kingdoms were established, and original Britons were forced into Wales, Scotland. It was not until the eleventh century that the country finally became united under the Danish King Canute. Following the death of Edward the Confessor (1066), a dispute about the succession arose, and William Duke of Normandy invaded England, defeating the Saxon King Harold II, at the Battle of Hastings (1066). The Norman conquest was accompanied by the introduction of Norman law and feudalism, changing the customs of England.

The reign of Henry II (1154-89), first of the Plantagenets, saw an increasing centralization of royal power at the expense of the nobles, but in 1215 John (1216) was forced to sign the Magna Carta, which awarded the people, especially the nobles, certain basic rights. Edward I (1272-1307) continued the conquest of Wales, reduced Wales to subjection, and made some gains in Scotland. In 1296, however, English forces led by Edward were ousted from Scotland after the Battle of Bannockburn.

AREA AND POPULATION OF MAJOR SUBDIVISIONS*

Subdivision	Area sq. mi.	Population est. 1956
England	50,871	45,240,000
Wales	7,474	
Scotland	29,795	5,220,000
Northern Ireland	5,459	1,400,000

* Not including Channel Islands and Isle of Man.

of Bannockburn. The late thirteenth and early fourteenth centuries saw the development of a separate House of Commons with tax-raising powers.

Edward III's claim to the throne of France led to the Hundred Years' War (1338-1453), which ended with the loss of almost all the large English territories in France. In England the great poverty and discontent caused by the war was intensified by the Black Death, a plague which reduced the population by about one-third. The Wars of the Roses (1455-85) were a struggle for the throne between the House of York and the House of Lancaster, ended by the victory of Henry VII (Henry VII) at Bosworth Field (1485).

During the reign of Henry VIII (1509-47), the Church in England asserted its independence from the Roman Catholic Church. Under Edward VI and Mary I two extremes of religious fanaticism were reached and it remained for Elizabeth I (1558-1603), to settle the Church of England on a moderate basis. In 1588 the Spanish Armada, sent out by Catholic King Philip II,

The Commonwealth of Nations

The Commonwealth is an association of 11 sovereign, independent states—the United Kingdom, Canada, Australia, New Zealand, Union of South Africa, India, Pakistan, Ghana, the Federation of Malaya and Nigeria, together with certain dependencies of various status: Colonies, Protectorates, Protected States and Trust Territories. These areas are listed here in alphabetical order by continents. General information about each area is given, pages 141 to 171, in the order in which it appears in this table.

Europe			America—(cont.)		
Political subdivision	Area (sq. mi.)	Population	Political subdivision	Area (sq. mi.)	Population
United Kingdom	93,599	51,680,000 ⁸	Jamaica and dependencies ¹	4,708	1,630,000 ⁸
Norfolk Islands	75	97,807 ⁸	Leeward Islands ^(1,2,8)	422	138,421 ⁸
Faroe Islands	221	55,000 ⁷	Trinidad and Tobago ¹	1,980	788,600 ⁸
Åland	2	25,657 ⁸	Windward Islands ^(1,2)	821	332,216 ⁸
	122	323,667 ⁸			
Africa			Asia		
Algeria	11,716	658,000 ⁸	Aden colony	108	140,000 ⁷
Angola	275,000	334,000 ⁸	Aden protectorate	112,000	660,000 ⁸
Benin	4,003	265,200 ⁸	Borneo:		
Burkina Faso	91,843	4,836,000 ⁸	Colony of North Borneo	29,388	416,435 ⁸
Cameroon	223,478	6,450,000 ⁹	Brunel	2,226	80,277 ⁸
Cape Verde	805	632,721 ⁸	Sarawak	47,069	675,316 ⁸
Central African Republic	339,169	33,854,000 ⁸	Ceylon	25,332	9,165,000 ⁷
Chad	17,500	677,000 ⁸	Hong Kong	391	2,806,000 ⁷
Cote d'Ivoire			India, Republic of	1,269,640	397,540,000 ⁸
Dahomey			Federation of Malaya	50,690	6,277,000 ⁷
Democratic Republic of Congo	290,323	2,300,000 ⁸	Singapore and dependencies	287	1,514,900 ⁸
Equatorial Guinea	49,177	2,710,000 ⁸	Pakistan	364,737	85,635,000 ⁸
Ethiopia	150,354	2,815,900 ⁸			
Gambia					
Ghana	119	5,412 ⁸			
Guinea	156	41,100 ⁷			
Guinea-Bissau	27,926	2,260,000 ⁸			
Ivory Coast	16,581	753,000 ⁸			
Kenya	317,725	539,000 ⁸			
Lesotho	6,705	260,000 ⁷			
Liberia	362,688	8,919,000 ⁸			
Madagascar	93,981	5,868,000 ⁹			
Malawi					
Mali					
Mauritania	472,733	14,673,000 ⁸			
Morocco	1,020	299,111 ⁸			
America			Oceania		
Argentina	4,404	136,229 ⁸	Australia, Commonwealth of	2,974,581	10,008,665 ⁹
Bolivia	166	236,812 ⁸	Fiji	7,040	274,284 ⁸
Brazil	21	43,480 ⁸	Gilbert and Ellice Islands	369	43,824 ⁸
Canada	82,997	539,940 ⁸	Nauru	8	4,308 ⁸
Chile	8,867	88,281 ⁸	New Hebrides	5,700	51,242 ⁸
Colombia	3,619,616	17,048,000 ⁸	New Zealand and island territories	103,740	2,350,250 ⁸
Cuba			Norfolk Island	13	1,033 ⁸
Czechoslovakia			Papua-New Guinea	183,590	1,827,781 ⁸
Denmark			Solomon Islands	11,500	114,300 ⁷
Dominican Republic			Tonga (Friendly Islands)	270	59,612 ⁸
Ecuador			Western Samoa	1,131	102,860 ⁸
El Salvador					
France					
Germany					
Greece					
Haiti					
Honduras					
India					
Indonesia					
Italy					
Jamaica					
Japan					
Korea					
Laos					
Lebanon					
Malaysia					
Mexico					
Moldavia					
Mongolia					
Morocco					
Netherlands					
Nicaragua					
Norway					
Poland					
Portugal					
Romania					
Russia					
Spain					
Sweden					
Switzerland					
Thailand					
Turkey					
Ukraine					
United States					
Uruguay					
Venezuela					
Yugoslavia					

(Note: Each population figure is followed by superior number denoting the year of estimate or census: ⁸ for 1959, ⁷ for 1958, ¹ for 1957, ² for 1956, etc.)

Member of the British West Indies Federation, formed in January 1958. ² The Virgin Islands have not joined the Federation. ³ There is no longer a common governor for the Leeward Is. nor for the Windward Is.

was defeated by the English and died during a storm. During Elizabeth's reign England became a world power.

Elizabeth's heir was of the house of —James VI of Scotland—who joined the two crowns as James I (1603–25). The Kings incurred large debts and were forced either to depend on Parliament or to raise money by illegal means.

In 1642 war broke out between Charles I and a large portion of the Parliament; Charles was defeated and executed in 1649, and the monarchy was then abolished. The Puritan Commonwealth endured for ten years, but after the death (1658) of Oliver Cromwell, the Lord Protector, the government fell to pieces and Charles II was restored to the throne in 1660. The struggle

between the King and Parliament continued, but Charles II knew when to compromise. His brother James II (1685-88) possessed none of his ability and was ousted by the Revolution of 1688, which confirmed the predominant position of Parliament. James' daughter, Mary, and her husband, William of Orange, now ruled jointly.

The reign of Queen Anne (1702-14) was marked by the Duke of Marlborough's victories over France at Blenheim, Oudenarde, and Malplaquet in the War of the Spanish Succession. England and Scotland meanwhile were joined together by the Act of Union (1707). Upon the death of Anne, the distant claims of the elector of Hanover were recognized, and he became King of England as George I.

The eighteenth century was a period of gradual growth and change. At home the unwillingness of the Hanoverian Kings to rule resulted in the formation by the King's ministers of a Cabinet, headed by a Prime Minister, which directed all public business. Abroad the constant wars with France resulted in expansion of the British Empire all over the globe, particularly in North America and India. This imperial growth was checked by the revolt of the American colonies (1775-81).

The age-long struggle with France broke out again in 1793, and during the lengthy Napoleonic Wars, which ended at Waterloo (1815), England was pitted at one time against almost all of Europe.

The Victorian era, named after Queen Victoria (1837-1901), saw the growth of a democratic system of government which had begun with the Reform Bill of 1832. The two important wars in Victoria's reign were the Crimean War against Russia (1853-56) and the Boer War (1899-1902). The latter was accompanied by enormous extension of England's sway in Africa.

The reign of Edward VII (1901-10) was marked by increasing uneasiness at home and abroad. Within four years after the accession of George V (1910), England entered World War I when Germany invaded Belgium. The nation was led by coalition Cabinets headed first by Herbert Asquith and then (Dec., 1916) by the Welsh statesman, David Lloyd George. The years after the war were marked by labor unrest which culminated in the general strike of 1926. A Labour ministry formed early in 1924 by Ramsay MacDonald fell in October of that year. In 1929 a second Labour government was formed, but the world economic depression forced a change in 1931, and a national government was formed, composed chiefly of Conservative members, although MacDonald remained Prime Minister until 1935. King Edward VIII succeeded to the throne in 1936 on his fa-

ther's death but abdicated eleven months later (in order to marry an American, Wallis Warfield Simpson, whose second marriage was then pending) in favor of his brother, who became King George VI.

The efforts of Prime Minister Neville Chamberlain to meet by peaceful means the rising threat of Nazism in Germany failed with the German invasion of Poland (Sept. 1, 1939), which was followed by England's entry into World War II (Sept. 3, 1939). Serious Allied reverses in the spring of 1940 led to Chamberlain's resignation and the formation of another coalition war Cabinet by Conservative leader Winston Churchill, who led England through most of World War II. Churchill resigned as the coalition leader after V-E Day, but then formed a "war-taker" government which remained in office until after the parliamentary elections of July 5, 1945, in which the Labour Party won an overwhelming victory. The government formed by Clement R. Attlee on July 26 began a moderate socialistic program.

Internationally, the Attlee government continued Britain's close co-operation with the United States through the North Atlantic Treaty and in the Korean war at the same time solidifying its position in western Europe in opposition to the U.S.S.R. The Labour regime, returned to office by a slight majority in the parliamentary elections of Feb., 1950, lost a narrow margin in the Oct., 1951 elections. On Oct. 26 Winston Churchill again became Prime Minister at the head of a Conservative government. George VI died on Feb. 6, 1952, and was succeeded by his daughter, Elizabeth II.

Churchill voluntarily stepped down on April 5, 1955, in favor of Sir Anthony Eden, who led the Conservatives to another victory in elections May 26, 1955. The Suez crisis and the abortive Anglo-French invasion of Egypt (Oct. 31, 1956) were followed by Eden's resignation on grounds of ill health (Jan. 9, 1957). Harold Macmillan succeeded him.

RULER. Queen Elizabeth II, born April 21, 1926, elder daughter of King George VI and Queen Elizabeth, succeeded to the throne on the death of her father, Feb. 6, 1952; married Nov. 20, 1947, to Prince Philip, Duke of Edinburgh, born June 2, 1921; their children are Prince Charles (heir presumptive), born Nov. 14, 1952, and Princess Anne, born Aug. 15, 1950. Queen's sister is Princess Margaret, born Aug. 21, 1930; her uncles are Prince Edward Albert, Duke of Windsor (formerly King Edward VIII), born June 23, 1894, and Prince Henry William, Duke of Gloucester, born March 31, 1900.

GOVERNMENT. The United Kingdom is a constitutional monarchy, with a Queen and a Parliament which has two houses.

House of Lords with about 830 hereditary peers, 26 spiritual peers, 16 Scottish representative peers, a number of Irish representative peers (vacancies are not filled), and a few life peers who have held high judicial office; and the House of Commons, numbering since 1955 members elected by practically universal suffrage. Supreme legislative power is vested in Parliament, which holds office for five years unless sooner dissolved. Executive power of the Crown is exercised by the Cabinet, headed by the Prime Minister. The latter, normally the head of a party commanding a majority in the House of Commons, is appointed by the monarch, with whose consent he in turn enters the rest of the Cabinet. All members must be members of one or the other House of Parliament; they are individually and collectively responsible to the Crown, the Prime Minister and Parliament. The Cabinet proposes bills and carries on the business of Parliament, but it depends entirely on the votes of confidence in the Commons. The lords cannot hold up "money" bills, but they can delay other bills for a period of at least one year.

Under the Act of Union (1707) the Scottish Parliament was assimilated with that of England, and Scotland is now represented in the Commons by seventy-one members. The Secretary of State for Scotland, a member of the Cabinet, is responsible for the administration of Scottish affairs.

ECONOMIC CONDITIONS. *Agriculture.* Agriculture remains one of Britain's chief industries, employing about 800,000 per-

cent of the population. The 1958 census (Dec., 1958) included 11,005,000 cattle, 20,370,000 sheep, 6,702,000 hogs, and 1,000,000 poultry. Cattle occupy a predominant position in British agriculture, accounting for about 40 per cent of the total output.

Industry. The most important British industry is heavy goods such as machinery, tools, bridges, and locomotives; industry is concentrated in the north and Midlands of England. Sheffield is the center of the steel industry, while the china industry is concentrated in the Midlands. The cotton industry is centered in Lancashire—Liverpool, Manchester, Oldham, Preston, and Bolton are the main manufacturing towns. The wool industry, England's largest trade, is located just east of London in towns at Leeds, Bradford, and in Yorkshire. An important industrial region is the central Lowlands of Scotland, where woolens and other fabrics, lace, paper, steel, and pig iron are produced. Important shipyards are located along the coast.

The total working population in May, 1958, was 23,897,000.

Trade. The United Kingdom's economic prosperity is dependent on its foreign trade, and the nation made great efforts after World War II to build up its volume of exports.

Leading exports are machinery (non-electrical), road vehicles and aircraft, chemicals, electrical machinery, iron and steel.

Leading imports are meat, fruits and vegetables, cereals and cereal preparations, nonferrous base metals and wool.

Chief customers are United States, Australia, Canada, India, South Africa, and New Zealand.

Chief sources of imports for 1958 were sterling area (38%); continental European Payments Union countries (24%), the U.S. and Canada (18%), and Latin America (8%).

Communications. The merchant marine on June 30, 1959, represented about 19.1% of the world total and was second only to the U.S. merchant fleet.

Nationalization of the railway and canal systems in Great Britain became effective Jan. 1, 1948, and are now operated by the government's Transport Commission.

British air services throughout the world are nationalized under the Minister of Civil Aviation. Service is supplied by two public corporations—British Overseas Airways (BOAC) and British European Airways.

NATURAL FEATURES AND RESOURCES.

The United Kingdom, consisting of England, Wales, Scotland, and Northern Ireland, is a third the size of Texas. England, in the southeast part of the British Isles, is separated from Scotland on the north by the granite Cheviot Hills; from them the Pennine chain of uplands extends south through the center of England, reaching its highest point in the Lake district in the northwest. To the west along the border of Wales—a land of steep hills and valleys—are the Cambrian Mountains, while the Cotswolds, a range of hills in Gloucestershire, extend into the surrounding shires. The remainder of England is plain land, though not necessarily flat, with the rocky sand-topped moors in the southwest, the rolling downs in the south and southeast and the reclaimed marshes of the low-lying Fens in the east central districts. Scotland is divided into three physical regions—the Highlands, the Central Lowlands, containing two-thirds of the population, and the Southern Uplands. The western Highland coast is intersected throughout by long, narrow sea-lochs, or fiords. Scotland also includes the Outer and Inner Hebrides and other islands off the west coast and the Orkney and Shetland Islands off the north coast.

Wales is generally hilly; the Snowdon range in the northern part culminates in Mt. Snowdon (3,557 ft.), highest in either England or Wales.

Important rivers flowing into the North Sea are the Thames, Humber, Tees, and Tyne. In the west are the Severn and the Wye, which empty into the Bristol Channel and are navigable, as are the Mersey and Ribble.

Minerals. Great Britain's most important mineral resource is coal, which was responsible to a large extent for British industrial supremacy during the late eighteenth and the nineteenth centuries. The coal mines were nationalized in 1946. Reserves have been variously estimated at from 150,000 million to 200,000 million tons. Prior to World War II, coal was exported in declining amounts to the continent, mainly to France, Sweden, Denmark and Italy. Since the war, however, Britain has been hard put to meet her own minimum domestic requirements.

Most of the British iron ore is produced in England, especially in Cumberland, Lancashire, and Staffordshire. Tin ore and copper are obtained almost exclusively from Cornwall, while lead comes mainly from Flint, Durham, and Derbyshire. Zinc occurs mainly in North Wales, the north of England, the Isle of Man, and the county of Dumfries in Scotland. The whole British supply of china clay (kaolin)—of great importance in the ceramic, paper-making, bleaching, and chemical industries—comes from Cornwall. Petroleum production is negligible, but oil shale exists in large quantities.

Water Power. The most important potential sources of water power are in the highlands of Scotland, North Wales, and Cumberland. Nationalization of the electric and gas industries became effective in 1948.

Forests and Fisheries. Great Britain was once heavily forested, but centuries of timber cutting and clearing have denuded the country of the original forests. Consequently the nation is heavily dependent on imported timber.

Great Britain's sea fishing industry is among the most important in the world. The principal kinds of fish caught are herring, cod, haddock, plaice, and hake, classed as wet fish, and, among shellfish, oysters, crabs, and lobsters. The most important factor in the export trade is salted herring, which ordinarily represents about 70 per cent of the total. Principal grounds frequented by British fishermen are the North Sea; off Iceland; the Faeroes; south of Ireland; west of Scotland; west of Ireland; the Irish Sea; and the English Channel.

NORTHERN IRELAND

(Part of United Kingdom)

Area: 5,459 square miles.

Population (est. June 1958): 1,403,000.

Density per square mile: 238.7.

Governor: Lord Wakehurst.

Prime Minister: Viscount Brookeborough.

Principal cities (census 1951): Belfast 443,671 (capital); Londonderry, 50,092.

Monetary unit: Pound sterling.

Language: English, Gaelic.

Religions (census 1951): Roman Catholic (34.4%), Presbyterian (29.9%), Church of Ireland (25.8%), Methodist (4.9%), other (5%).

Northern Ireland comprises the six predominantly Protestant counties of Antrim, Armagh, Down, Fermanagh, Londonderry, and Tyrone (collectively known as Ulster), which form the northern part of the island of Ireland. The area is an integral part of the United Kingdom, but under the terms of the Government of Ireland Act (1920) it has a semiautonomous government.

The government has only limited powers for local purposes, and many matters are reserved to the central government at Westminster. Executive authority is vested in the Crown-appointed Governor, who is advised by a Cabinet of eight ministers headed by the Prime Minister. The Parliament consists of the House of Commons of fifty-two members elected for five-year terms, and the Senate of twenty-six members elected by the House of Commons. The area is also represented by two members in the British House of Commons.

Agriculture is the largest single industry; about two-thirds of the country is devoted to crops and pasture under a system of mixed farming. The leading crops include potatoes, oats, and flax. In 1957 there were 905,890 cattle, 878,480 sheep, and 696,410 hogs.

The two principal manufacturing industries are linen and shipbuilding, both centered in Belfast. The linen industry was established by Huguenot weavers who fled from France after the revocation of the Edict of Nantes in 1685.

ISLE OF MAN

Lieutenant Governor: Sir Herbert T. Vevy.

Located in the Irish Sea, equidistant from Scotland, Ireland, and England, the Isle of Man is administered according to its own laws by a government composed of the Lieutenant Governor, a Legislative Council, and a House of Keys, one of the most ancient legislative assemblies in the world.

CHANNEL ISLANDS

Lieutenant Governor of Jersey: General G. W. E. J. Erskine.

Lieutenant Governor of Guernsey: Adm. S. Geoffrey Robson.

is group of islands, lying in the English Channel off the northwest coast of France, is the only portion of the Duchy of Normandy belonging to the English crown, to which it has been attached since the conquest of 1066. It was the only French possession occupied by Germany during World War II.

For the purposes of government the islands are divided into Jersey (45 sq. mi.) and the Bailiwick of Guernsey (24 sq. mi.), including Alderney (3 sq. mi.), Sark (2 sq. mi.), and Jethou. The islands are administered according to their own laws and customs by local governments headed by appointed Lieutenant Governors. Members of Parliament in London are not elected from the islands unless they are specially mentioned.

French is still the official language, although English is the main language of commerce.

SEYDLAR—Status: Colony.
Governor: Gen. Sir Chas. Keightley.

Seydlar, at the south end of the Iberian Peninsula, is a rocky promontory commanding the western entrance to the Mediterranean. Aside from its strategic importance, it is also a free port, naval base and coaling station. It was captured by the Arabs crossing from Africa into Spain in A.D. 711. In the fifteenth century it passed to the Moorish ruler of Granada and later became Spanish. It was captured by an Anglo-Dutch force in 1704 during the War of the Spanish Succession and was returned to Britain by the Treaty of Utrecht in 1713. Most of the inhabitants are of French, Italian and Maltese descent.

SEYDLAR—Status: Self-governing colony.
Capital: Valletta (population 18,801).
Governor: Sir Guy Grantham.
Minister: (Post now vacant).
Cultural products: potatoes, onions, citrus fruits.

The Maltese islands lie between Europe and Africa, in the central channel linking the eastern and western Mediterranean. The inhabited islands are Malta (95 sq. mi.), Gozo (26 sq. mi.) and Comino (1 sq. mi.). The Knights of St. John (Malta), who obtained the islands from Charles V in 1565, reached their highest fame when they withstood an attack by superior Turkish forces in 1565. Napoleon seized Malta in 1798, but the French forces were ousted by British troops in 1799, and British rule was confirmed by the Treaty of Amiens (1814). The principal importance of Malta is its strategic location as a naval base. It was heavily attacked by German aircraft during World War II and was never invaded by the Axis. Most of the population are Maltese, speaking a Sicilian Maltese language, a tongue which is a mixture of Syriac and Arabic. The islands are

densely populated (2,554 per square mile in 1956).

Under its 1947 Constitution, Malta enjoyed a measure of self-government. In April, 1959, the British Colonial Office suspended the 1947 Constitution and issued an interim Constitution granting the Government power to enact ordinances and to accept or reject the advice of an Executive Council concerned with questions of domestic administration of the island. Defense and foreign affairs are reserved to the British government under Section 14 of the new Constitution.

AFRICA

BRITISH SOUTH AFRICAN TERRITORIES

High Commissioner: Sir John Maud.

The three British territories in southern Africa—Basutoland, Bechuanaland and Swaziland—are not part of the Union of South Africa but are administered by a High Commissioner responsible to the Secretary of State for Commonwealth Relations in the British Cabinet. He is also High Commissioner for the United Kingdom in the Union of South Africa.

BASUTOLAND—Status: Colony.
Capital: Maseru (population 4,000).
Resident Commissioner: A. G. T. Chaplin.
Agricultural products: corn, wheat, sorghum.

Basutoland is a mountainous enclave surrounded by the Union of South Africa and bounded by the Orange Free State, Cape Province and Natal. It was constituted a native state under British protection by a treaty signed with the native chief Moshesh in 1843. It was annexed to Cape Colony in 1871, but on Mar. 13, 1884, was restored to direct control by the Crown. The Resident Commissioner is advised by a council of 100, of whom 95 are nominated by the native chiefs who administer the affairs of their tribes.

The population is restricted almost entirely to the lowland strip in the west; the white population (1,926 in 1956) consists solely of officials, missionaries, traders, and a few labor agents for employers in the Union of South Africa. About 100,000 natives are regularly employed in the Union. Sheep raising is highly developed. Land is the common property of the nation and is held in trust by the chiefs.

BECHUANALAND—Status: Protectorate.
Administrative center: Mafeking, in Cape Province (population 4,666).
Resident Commissioner: Robert P. Fawcus.

Agricultural products: hides and skins, cattle, butter, millet, maize.
Minerals: gold and silver.

Bechuanaland lies in south central Africa, bounded on the south and southeast by the Union of South Africa, on the west by South-West Africa, on the north by Angola and Northern Rhodesia and on the northeast by Southern Rhodesia. Its average elevation is 3,300 feet and the greater part is gently undulating. The area was placed under British protection on Sept. 30, 1885, to prevent further Boer encroachment and has since remained a British protectorate. The form of government is similar to that of Basutoland.

Most of the inhabitants are Bantu, but there were 3,177 Europeans in 1956, a few of them farmers. The country is essentially pastoral, with cattle raising and dairy farming the chief industries. Gold is mined in the Tati district near Francistown. There is also some mining of silver and copper. Timber is produced for use as fuel and pit props.

SWAZILAND—Status: Protectorate.

Capital: Mbabane (population 1,600).

Resident Commissioner: B. A. Marwick.

Agricultural products: cattle, hides and skins, butter, tobacco, corn, millet.

Minerals: asbestos, tin, gold.

Swaziland lies at the southeastern corner of the Transvaal. It is largely hilly, with an average elevation of 4,000 feet in the west. It came under the protection of the Transvaal Republic in 1894 but was made a British protectorate in 1906 under the High Commissioner for South Africa.

The natives are mostly Swazi; there were 5,932 Europeans in 1956, mostly farmers. Grazing is the principal native occupation; there is excellent pasture in the high land to the west. Tropical and subtropical crops are raised in the lower areas. Tin is mined near Mbabane.

EAST AFRICA HIGH COMMISSION

The East Africa High Commission, comprising the Governors of Kenya, Tanganyika and Uganda, administers the public utilities and other central services of those territories, and has power to legislate with respect thereto with the advice and consent of a Central Legislative Assembly. The governments of the three areas are otherwise independent of one another.

KENYA—Status: Colony and protectorate.

Capital: Nairobi (pop. 1956: 118,978).

Governor: Sir Patrick Muir Renison.

Foreign trade (1956): domestic exports, 25% to Britain; imports, 51% from Britain. Chief exports: coffee (47%), tea (9%), sisal (7%).

Agricultural products (exports 1956): coffee, tea, sisal.

Minerals: gold, sodium carbonate, silver, salt.

Forest products: wattle bark extract, timber.

Kenya extends along the Indian Ocean between Ethiopia and Tanganyika Territory and westward to Lake Victoria. Uganda. Formerly known as the East Africa Protectorate, it was held under a cession from the Sultan of Zanzibar by Imperial British East Africa Company, 1888 to 1905. It became a Crown colony in 1920, the coastal strip leased from Sultan becoming a protectorate.

The colony is predominantly agricultural, and a large area is cultivated by Europeans. Altitude ranges from sea level more than 9,000 ft.; hence, the cultivation of tropical, subtropical and temperate crops is possible.

Kenya has been plagued since 1954 serious outbreaks of native terrorism inspired by the anti-white Mau Mau society, which have taxed strengthened security forces, including British regular army units.

TANGANYIKA TERRITORY—Status: U. N. trust territory.

Capital: Dar es Salaam (pop. 1957: 742).

Governor: Sir Richard G. Turnbull.

Foreign trade (1956): domestic exports 31% to Britain; imports, 41% from Britain. Chief exports: sisal (24%), cotton (21%), diamonds.

Agricultural products: sisal, coffee, cotton, peanuts, sugar cane, tea.

Minerals: gold, diamonds.

Forest products: gum arabic and beeswax, timber.

Tanganyika Territory, with the Belgian Ruanda and Urundi, constituted German East Africa from 1884 until 1919. It was administered under League of Nations mandate by Britain until 1946, when it was placed under United Nations trusteeship with Great Britain as the administering power.

Tanganyika's narrow coastal plain is bordered on the west by the precipitous eastern side of the Central African plateau. Mount Kilimanjaro (19,565 ft.) is the highest point on the African continent. The territory also includes adjacent islands in the Indian Ocean.

The territory is sparsely populated; two-thirds of it is uninhabited. It is the world's largest producer of sisal hemp.

UGANDA—Status: Protectorate.

Capital: Entebbe (pop. 1957: 8,500).

Governor: Sir Frederick Crawford.

Foreign trade (1956): exports, 28% to India; imports, 30% from Britain. Chief exports: cotton, coffee.

Agricultural products: cotton, sugar cane, rubber, tea, sisal.

Minerals: gold, tin.

Uganda lies immediately south of Egyptian Sudan and west of Kenya, on the northwest shore of Lake Victoria. Its surface is extremely diversified, with

us, snow-capped peaks, swamps, for-
and arid areas. A British protectorate
the area was proclaimed in 1894. A
measure of home rule is given the
states, notably Buganda, whose
a (king) is assisted by a ministry
native parliament.

culture, including livestock, is the
of the economy. Cotton is raised,
pally by natives, and coffee, tea and
are grown on large plantations.
natives possess large herds of cattle
heep.

GHANA—Status: Colony and protector-

ital: Bathurst (population 19,602).

ernor: E. H. Windley.

ign trade. Chief export: peanuts

cultural products: peanuts, hides
kins, millet, rice, palm kernels.

abia, smallest of the British West
dependencies, is a stretch of land
lles long on both sides of the lower
la River, surrounded on all land sides
nch West Africa and fronting on the
ic Ocean. During the 17th century
settled by various companies of
h merchants; slavery was the chief
of revenue until it was abolished in
Gambia became a Crown colony in
Except for the island of St. Mary, on
the capital stands, the area is ad-
red as a protectorate.

inhabitants, mostly Negroes or Ne-
are predominantly Mohammedan.
ncipal economic activity is the cul-
n of peanuts. Internal transporta-
by steamer and launch.

Ghana (Republic)

ber of Commonwealth of Nations)

: 91,843 square miles.

lation, (est. 1958): 4,836,000 (al-
ntirely African).

ity per square mile: 52.7.

dent: Kwame Nkrumah.

ipal cities (est. 1958): Accra,
(capital); Kumasi, 99,000 (rail
(rail terminus and port).

itary unit: Gold Coast pound.

uages: Native tongues (Twi, Fanti,
nglish.

ions: Pagan, Mohammedan, Chris-

STATUS IN THE WORLD TODAY

official international policy of
newest independent member of the
Commonwealth, is one of "non-
nt" in the cold war, but the nation
ing in a westerly direction and
to the United States for financial
developing its economic resources.
ions with the rest of Africa, Prime

Minister Nkrumah, who was educated in
the United States, aspires to leadership of a
pan-African movement, and, with Guinea,
the only French colony to choose inde-
pendence instead of a limited autonomy
within the French Union, has formed the
Union of Independent African States, little
more than a very loose federation.

Politically, there has been criticism of
Ghana for the sometimes undemocratic
methods resorted to under Nkrumah's one-
party control of the country: revising the
constitution to meet the ruling party's
fancy; dissolving the regional assemblies
and curbing the powers of tribal chief-
tains; arresting and detaining opponents
of the government, including members of
Parliament, without trial. But supporters
of the regime maintain that a strong hand
is necessary for stability while the new na-
tion suffers its growing pains.

Ghana has a prosperous economy based
on cocoa, of which it is the world's largest
producer, although it is at times vulner-
able to price fluctuations on the world
market. The cocoa crop 1958-9 amounted
to over 250,000 tons. It also has large baux-
ite deposits and plans are well advanced
to carry out a Volta River dam project
which will furnish power for an aluminum
industry in the interior as well as the de-
velopment of other new industries.

HISTORY AND GOVERNMENT. Created
an independent country on March 6, 1957,
Ghana is the former British colony of the
Gold Coast. The area was first seen by
Portuguese traders in 1470. They were fol-
lowed by the English (1553), the Dutch
(1595), and the Swedes (1640). British
rule over the Gold Coast began in 1820,
but it was not until after quelling the
severe resistance of the Ashanti in 1901
that it was firmly established. British
Togoland, formerly a colony of Germany,
was incorporated into Ghana by referen-
dum in 1956. As the result of a plebiscite,
Ghana became a republic on July 1, 1960.
ECONOMIC CONDITIONS. The mainstay
of the economy is the cultivation of cacao,
in the production of which Ghana leads
the rest of the world. Secondary export
crops include palm kernels, copra, kola
nuts, coffee, and rubber.

Chief exports in 1958 were cacao (59%),
wood and lumber (11%), diamonds (9%),
gold (9%) and manganese ore (8%). Chief
customers in 1955 were Britain (35%), the
U. S. (14%) and the Netherlands (11%);
leading suppliers, Britain (35%), Japan
(10%), and the Netherlands (8%).

Mineral resources are abundant. Most
important is gold, mined at Tarkwa,
Bibiani, and Obuasi. Others include dia-
monds, manganese ore, and bauxite. Forest

resources are extensive and large amounts of hardwoods, notably mahogany, are exported from the forests in the interior.

The coastal belt of the new nation, extending about 270 miles along the Gulf of Guinea, is sandy, marshy and generally exposed. Behind it is a gradually widening grass strip. The forested plateau region to the north is broken by ridges and hills.

MAURITIUS—Status: Colony.

Capital: Port Louis (pop. 1956: 80,200).

Governor: Sir Colville Devereil.

Foreign trade. Chief export: sugar (96%).

Agricultural products: sugar, tea, tobacco, copra.

Mauritius is a mountainous island of volcanic origin in the Indian Ocean, about 500 miles east of Madagascar. It was seized in 1810 from the French, who had settled it in 1715, and was formally ceded to Great Britain by the Treaty of Paris in 1814.

With over 700 persons per square mile, the island is one of the most densely populated regions in the world. There is a large white element, chiefly French and British, but British Indians are predominant. There are many half-castes.

Nigeria (Republic)

(Member of Commonwealth of Nations)

Area: 339,169 square miles.

Population, (est. 1958): 33,854,000.

Density per square mile: 99.9.

High Commissioner: Antony Head.

Federal Premier: A. A. T. Balewa.

Principal cities: (est. 1958): Ibadan, 500,000 (native metropolis); Lagos, 337,000 (capital); Ogbomosh, 139,535 (native city); Kano, 130,173 (textiles, leather goods, cattle).

Monetary unit: Nigerian pound.

Languages: Native tongues, Arabic, English.

Religions: Mohammedan, Pagan, Christian.

STATUS IN THE WORLD TODAY

Nigeria became independent on Oct. 1, 1960,* following the pattern set in 1957 by Ghana. In common with the other territories of West Africa, Nigeria has advanced rapidly on the road to self-government since 1945. Although British control over the colony was established in 1900, little effort was made before World War II to introduce popular representation. An efficient system of colonial administration was set up, at the head of which was a Legislative Council with a few African elected members, but not until 1946 were popularly elected Regional Houses of Assembly created.

Nigeria is perhaps the richest of the West African territories in variety of nat-

ural resources. About 75 per cent of world's supply of columbite, a rare metal used in alloys for jet engines, comes from Nigeria. There are good prospects for commercial oil production in Eastern Nigeria. Nigerian industry is still in its early stages of development, but with the rapid spread of education it is expected that within a few years many of the products now imported will be manufactured at home by skilled Nigerian labor.

Nigeria, with an area twice that of California, is situated on the Gulf of Guinea in West Africa. Between 1879 and 1914 private colonial developments by the British with reorganizations of the Crown's interest in the region, resulted in the formation of Nigeria as it exists today. During World War I, native troops of the West African frontier force joined with French forces to defeat the German garrison in the Cameroons. The Cameroons, a narrow strip along Nigeria's eastern border, became a League mandate after World War I, divided between France and Britain.* In early 1946 the British Secretary of State for Colonial Affairs announced the approval of a grant of £750,000 to assist in the expansion of educational facilities in Lagos. An additional \$33.6 million loan for development of the country's economy was made when Nigeria became independent.

ECONOMIC CONDITIONS. Among the leading export crops are cacao, peanut palm kernels, palm oil, and rubber. Eggs and skins are also important export items. Aside from small native industry, there is no manufacturing.

Chief exports in 1958 were peanuts (21%), cacao (18%), palm kernels (11%) and palm oil (9%). Leading customers were Britain (55%), the Netherlands (10%), and the U. S. (9%); leading suppliers, Britain (43%), Japan (13%) and Western Germany (8%).

Nigeria is a leading tin producer from mines on the Bauchi plateau. Coal, minerals are coal, gold, lead, silver, tungsten. Over half the area is forested. Mahogany is the main timber export.

* Northern and Southern Cameroons, formerly administered by Britain for administrative purposes, continue as separate territories.

NORTHERN CAMEROONS (See footnote to NIGERIA)

FEDERATION OF RHODESIA AND NYASALAND

Governor General: Earl of Dalhousie.
Prime Minister: Sir Roy Welensky.

Foreign trade (1956): exports, 58% to Britain, 10% to Union of South Africa, imports, 41% from Britain, 34% from Union of South Africa. Chief exports: cotton (38%), tobacco (15%), asbestos (10%).

TANZANIA IN THE WORLD TODAY

The Central African Federation consists of the two British protectorates of North Rhodesia and Nyasaland and the self-governing British colony of South Rhodesia and stretches for more than 1,000 miles south from the borders of Tanganyika to the northern rim of the Union of South Africa.

The Governor General of the Federation is appointed by the British Crown, and the Federal Assembly of 59 members is partly elected and partly appointed. The distribution of Assembly seats by territory is 31 to Southern Rhodesia, 18 to Northern Rhodesia, and 10 to Nyasaland.

The rate of African advancement and the distribution of political power between the races are the major internal issues within the Federation. Southern Rhodesia is leading the Federation in the struggle for dominion status. American investments have been substantial in this area and the minerals of the Rhodesias, especially copper, have added further to the strategic importance of these territories.

NORTHERN RHODESIA—Status: Protectorate.

Capital: Lusaka (pop. 1956: 60,000).

Governor: Sir Evelyn Hone.

Cultural products: tobacco, maize,

Minerals: copper, cobalt, vanadium, lead,

NYASALAND—Status: Protectorate.

Capital: Zomba (pop. 1956: 6,600).

Governor: Sir Robert Armitage.

Cultural products: tobacco, tea,

SOUTHERN RHODESIA—Status: Self-governing colony.

Capital: Salisbury (pop. 1956: 186,850).

Governor: Humphrey Gibbs.

Prime Minister: Sir Edgar Whitehead.

Cultural products: tobacco, corn, wheat, meat, hides, and skins.

Minerals: asbestos, gold, coal, chrome

ST. HELENA—Status: Colony.

Capital: Jamestown (pop. 1956: 1,568).

Governor: R. E. Alford.

Foreign trade (1956): exports, 71% to

Britain; imports, 44% from Britain. Chief exports: hempen products (82%).

Cultural products: flax, potatoes.

St. Helena is a volcanic island (47 sq. miles) in the South Atlantic about 1,200 miles from the west coast of Africa. It is famous as the place of exile of Napoleon (1815).

It was taken for Britain in 1651 by the British East India Company and became a Crown colony in 1833. Attached to it are Ascension Island (34 sq. mi.), St. Paul's, and the Tristan da

Cunha group (45 sq. mi.); about 1,200 miles southwest. Most of the inhabitants are of mixed European, East Indian and African descent.

SEYCHELLES—Status: Colony.

Capital: Victoria (population 10,000).

Governor: Sir John Thorp.

Foreign trade (1956): exports, 69% to India; imports, 38% from Britain. Chief export: copra (69%).

Agricultural products: cinnamon, patchouli oil, coconuts, maize, sugar cane.

This archipelago of about 92 islands in the Indian Ocean was seized from France by British troops in 1794 and ceded to Britain by the Treaty of Paris in 1814. The principal island is Mahé (55 sq. mi.), about 600 mi. northeast of Madagascar.

SIERRA LEONE—Status: Colony and protectorate.

Capital: Freetown (pop. 1956: 100,000).

Governor: Sir Maurice Dorman.

Prime Minister: Sir Milton Margai.

Foreign trade (1956): exports, 63% to Britain; imports, 54% from Britain. Chief exports: diamonds (41%), iron ore (30%), palm kernels (11%).

Agricultural products: palm kernels, palm oil, rice, millet, cassava, rubber.

Minerals: iron ore, diamonds, gold.

Forest products: palm kernels, pllassava.

Sierra Leone lies on Africa's west coast between French Guinea and Liberia. It is a well-watered hilly country but has a low swampy coastland with an extremely unhealthy climate. The coastal area (colony proper) was ceded to English settlers in 1788 as a home for Negroes discharged from the British armed forces and also for runaway slaves who had found asylum in London. The British protectorate over the hinterland was proclaimed in 1896. It was not until 1928 that slavery was totally abolished in the protectorate. Under the 1951 Constitution as amended the House of Representatives has 57 members, of whom 51 are elected directly or indirectly. The colony has been promised its independence on April 27, 1961.

Freetown is the best harbor on the west coast. Iron ore (60% metal content) from deposits at Marampa is shipped from Pepel, northeast of Freetown.

SOUTHERN CAMEROONS (See footnote to NIGERIA)

SOUTH-WEST AFRICA (See UNION OF SOUTH AFRICA)

SWAZILAND (See BRITISH SOUTH AFRICAN TERRITORIES).

TANGANYIKA & UGANDA (See EAST AFRICA HIGH COMMISSION)

Union of South Africa†

(Member of Commonwealth of Nations)

Area: 472,733 square miles.*

Population (est. 1959): 14,673,000 (Euro-

ean, 20.9%; Bantu, 66.9%; mixed, 9.2%; Asiatic, 3.0%).

Density per square mile: 31.0.

Ruler: Queen Elizabeth II.

Governor General: Charles R. Swart.

Prime Minister: Hendrik Verwoerd.

Principal cities (est. 1957): Johannesburg, 1,030,200 (gold, industrial center); Capetown, 709,200 (seat of legislature, seaport); Durban, 612,800 (seaport); Pretoria, 335,300 (seat of administration); Port Elizabeth, 239,600 (seaport).

Monetary unit: South African pound (ESA).

Languages: English, Afrikaans.

Religions (European pop., 1946): Dutch Reformed Churches, 55%; Anglican Church, 19%; Methodist, 6%; Presbyterian, 5%; Roman Catholic, 5%; others 10%.

† Voted to become a republic in 1961.

* Excluding South-West Africa.

STATUS IN THE WORLD TODAY

Although the Union of South Africa is definitely anti-Communist, the dominant policy of apartheid of the ruling Nationalist Party, which has been in power since 1948, is one which is opposed by many nations within the Free World. The Nationalists also sought, unsuccessfully, to maintain South Africa's neutrality in World War II in 1939, and since coming to power have fought for the formation of a republic and white supremacy.

In its ultimate form, the policy of apartheid is envisaged as total separation of the races by removing the Bantu from those areas presently occupied by Europeans. They would be forced to live in reserved areas which would be under African forms of local government. These areas would be industrialized gradually so that there would be no need to leave the area for work. It is, of course, universally acknowledged that complete separation is not possible in the foreseeable future, but this is the ultimate goal toward which the racial policy is directed, and a number of legislative acts to enforce certain aspects of apartheid have been promulgated in the past ten years. Increasingly repressive measures affecting the Negro population in 1959 and 1960 led to wide-spread strikes and demonstrations. The climax was an assassination attempt by a white settler which seriously wounded Prime Minister Verwoerd and resulted in a declaration of a "state of emergency."

The rise of a mining industry—with the discovery of gold and diamonds—transformed the traditional agricultural economy of South Africa, and since World War I the economic focus has been shifting to the cities and the industries growing up around them. Manufacturing now contributes the largest share of the Union's income. Over 50 per cent of the

raw materials used in industry are produced within the Union. Economic expansion has created a need for new cap resources and since World War II over a billion of foreign capital—chiefly British and European—has flowed into South Africa. If the Union is to continue growth both in the manufacturing and the processing of raw materials, it would appear to be little alternative but to employ and training more African workers, since the skilled-labor supply in some industries is already short. It remains to be seen how this need can be reconciled with the goals of apartheid.

HISTORY AND GOVERNMENT.

Dutch settlers first came to South Africa in 1652. By the beginning of the eighteenth century, nearly 2,000 settlers were established. Although the colony was made up of Europeans from various countries, it assumed a thoroughly Dutch character.

In consequence of the Napoleonic wars, Britain gained control over the Cape Colony in 1814 and within seven years British settlers had taken up residence. British administration freed the slaves upon whom many Boer farmers depended for labor and sought to establish equality of rights for the colored population. By the mid-nineteenth century the present form of the Union was emerging; settlers were scattered on the northern slopes of the Vaal and Orange rivers. In 1877, British annexed the Transvaal territory and although it was relinquished again in 1881, the act created bitter resentment among the Dutch settlers. The conflict between the imperialism of England and the republicanism of the Boer people culminated in the Jameson Raid, which was the opening gun of the bitter Anglo-Boer war (1899–1900).

The two years of war paved the way for the creation of the Union of South Africa but it left behind a bitterness which still exists until today. The Union in its present form came into existence in 1910 by the South Africa Act. At its head is the Union Government, and within each of the four provinces (Cape, Transvaal, Orange Free State and Natal) there are provincial parliaments. The dual nature of the Union is illustrated by the fact that there are two capitals (Cape Town and Pretoria), two official languages (English and Afrikaans), two flags, and two national anthems. The Union Parliament is made up of the House of Assembly, consisting of 163 members, and a Senate of eighty-nine members. House members hold their seats for 5 years and senators for 10 years unless Parliament is dissolved before the end of their term.

ECONOMIC CONDITIONS. South Africa is predominantly a pastoral country, with more than 15 per cent of its area considered arable. Sheep and cattle raising are the principal occupations, especially in the veldt. In 1955 there were 37,576,000 sheep, 11,709,000 cattle, and 491,000 hogs. Climate and differences in terrain combine to give a great variety of agricultural products. The staple crop is maize, grown everywhere. In southwest Cape Province, products of the Mediterranean type predominate, while in the coastal belt of Natal and in northern Transvaal subtropical crops, especially sugar, are grown.

Wool, beverages and tobacco, and metal products are leading products. As a result of the need for armaments a wartime iron and steel industry was established, and the chemical, textile, and auto assembly plants were expanded.

Chief exports in 1958 (besides gold) were wool (16%) and diamonds (8%). Chief customers (1957) were Britain (33%), Rhodesia and Nyasaland (13%), the United States and Canada (8%); chief suppliers, Britain (33%), the United States and Canada (21%), Germany (11%), other EPU countries (12%). Chief imports included textiles, farm machinery, motor vehicles, petroleum products.

PHYSICAL FEATURES AND RESOURCES. The Union has a high interior plateau, the veldt, nearly half of which averages more than 5,000 feet in elevation. There are no important mountain ranges, although the Drakensberg Escarpment, separating the veldt from the coastal plain, rises to over 10,000 feet. The principal river is the Orange, rising in the east and flowing westward through Basutoland and flowing westward for 1,000 miles through the Union's center to the Atlantic.

Extensive mineral resources account for the economic prosperity. The Union is the world's leading gold producer. Diamond production is now surpassed in importance by coal. Uranium, gypsum, tin, and tungsten also are mined.

Whaling industry, centered at Durban on the east coast, produces considerable quantities of whale oil. The Union has extensive fishery resources along the 1,500 miles of coast line.

SOUTHWEST AFRICA—Status: Man-

Administrator: Daniel du P. Viljoen.

Capital: Windhoek (population 36,000). Chief products: hides and skins, corn, wheat.

Minerals: diamonds, vanadium, tungsten, lead, tin, iron ore, copper.

Mandate, bounded on the north by the Orange River, and on the east by Bechuanaland. The Union of South Africa, was discovered by the Portuguese explorer Diaz

in the late 15th century. It is for the most part a portion of the high plateau of South Africa with a general elevation of from 3,000 to 4,000 feet. It became a German colony in 1884 but was conquered by South African forces in 1915, becoming a Union territory by the terms of the Treaty of Versailles. The Union of South Africa's application for incorporation of the territory into the Union was rejected by the United Nations assembly on Dec. 14, 1946, and the Union was invited to prepare a trusteeship agreement instead. By a law passed in April, 1949, however, the territory was brought into much closer association with the Union—including representation in the Union Parliament.

The country in general is better suited to grazing than to the raising of crops because of the light rainfall. The karakul sheep industry is well developed.

ZANZIBAR—Status: Protectorate.

Capital: Zanzibar (pop. 1957: 49,494).

Sultan: Seyyid Sir Abdulla.

British Resident: Sir George Mooring.

Foreign trade (1958): exports, 60% to Indonesia and British Commonwealth; imports, 28% from Britain. Chief export: cloves (80%).

Agricultural products: cloves, clove oil, coconut oil, copra.

The protectorate consists principally of the islands of Zanzibar (640 sq. mi.) and Pemba (380 sq. mi.), just off the East African coast. Before 1890, the sultanate's territory also included a large area on the mainland, now comprising Italian Somaliland, Kenya and Tanganyika Territory. It was proclaimed a British protectorate Nov. 4, 1890. The British Resident administers the government, but the Sultan still retains considerable authority.

Principal industry is the production of cloves—about 80 per cent of the world supply.

WESTERN HEMISPHERE

BAHAMAS—Status: Colony.

Capital: Nassau (population 50,405).

Governor: Sir Oswald Arthur.

Foreign trade (1956): exports (57% to the U. S.); imports (53% from the U. S.). Chief exports: lumber (26%), crawfish.

Agricultural products: tomatoes, citrus fruit, sisal.

Sea products: sponges, lobsters, crawfish.

The Bahamas are an archipelago of about 3,000 islands, islets (cays) and rocks, east of Florida and north of Cuba, extending from N.W. to S.E. for about 800 miles. Only about 20 of the islands are inhabited; the most important is New Providence (20 sq. mi.) on which Nassau is located. The islands were reached by Columbus in Oct., 1492, and were a favorite pirate resort in the early 18th century. They have been a Crown colony since 1717. The Con-

stitution provides for a nominated Legislative Council and a popularly elected Assembly. The Governor is advised by an Executive Council.

About 82% of the population is Negro. The tourist trade is of paramount importance, especially at Nassau.

BARBADOS—Status: Colony.

Capital: Bridgetown (pop. 1957: 18,650).

Governor: Sir John Montagu Stow.

Chief Minister: Dr. H. G. H. Cummins.

Foreign trade (1956): exports (53% to Britain); imports (35% from Britain). Chief exports: sugar (67%), molasses (12%), rum.

Agricultural products: sugar, cotton, maize, cassava.

Manufactures: rum, molasses.

Barbados, an island east of the Windward group in the West Indies, has been a British possession since 1627; it is believed to have been first visited by the Portuguese. The colony has a nominated Legislative Council and a popularly elected Assembly of 24 members. Under a ministerial system of government inaugurated Feb. 1, 1954, the Prime Minister and 4 other members of the Executive Committee (all 5 being members of the Assembly) exercise executive responsibility for most of the departments of government, except defense and foreign affairs.

The island is very densely populated (about 1,400 per sq. mi.). About 93 per cent of the inhabitants are Negro, 5 per cent white and the remainder of mixed blood. Approximately 70 per cent of the total area is cultivated and half of this is devoted to sugar, which is the staple product; there are sugar and molasses plants and several rum distilleries.

BERMUDAS—Status: Colony.

Capital: Hamilton (population 3,500).

Governor: Maj. Gen. Sir Julian Gascoigne.

Foreign trade (1956): exports, £511,581; re-exports, £4,154,343; imports, £13,159,853 (53% from the U. S.). Chief domestic exports: pharmaceuticals (42%), concentrated essences.

Agricultural products: lily bulbs, potatoes, vegetables, arrowroot.

The Bermudas comprise an archipelago of about 360 small islands, 580 miles east of North Carolina. The largest is (Great) Bermuda, or Main Island. Discovered by Juan Bermudez, a shipwrecked Spaniard, early in the 16th century, the islands were settled in 1612 by an offshoot of the Virginia Company and became a Crown colony in 1684. The Governor is assisted by nominated Executive and Legislative Councils and a popularly elected Assembly of 36 members. In 1940, sites on the islands were leased for 99 years to the U.S. for air and navy bases. Bermuda is also the headquarters of the West Indies and Atlantic

squadron of the Royal Navy. The most important factor in the colony's economy is the tourist trade. The arable land is devoted to horticulture rather than to agriculture. The colony is heavily dependent on food imports.

BRITISH GUIANA—Status: Colony.

Capital: Georgetown (population 126,550).

Governor: Sir Ralph Grey.

Foreign trade (1956): exports (40% to Canada, 32% to Britain); imports (44% from Britain). Chief exports: sugar (44%), bauxite (31%), rice (10%).

Agricultural products: sugar, rice, coffee, fruit.

Minerals: bauxite, gold, diamonds.

Forest products: balata, timber.

The only British possession in South America proper, British Guiana is on the northeastern coast between Venezuela and Surinam (Dutch Guiana). Settled by the Dutch in the 17th century, it was ceded to the British in 1796 and ceded to them at the end of the Napoleonic wars. Behind the low plain which contains the largest farm area is a higher area containing the richest forest and mineral resources. A new Constitution inaugurated Apr. 1, 1953, provided for a bicameral Legislature, with a lower house largely elected under universal adult franchise and an Executive Council with a majority of ministers drawn from the lower house, on whose advice the Crown-appointed Governor was bound to act. Following charges of Communist infiltration into the government, British military and naval reinforcements were dispatched to the colony, and on Oct. 9, 1953, the Constitution was suspended.

Forest resources, mostly unexploited, have been estimated at about 40,000,000 cubic feet of merchantable timber.

BRITISH HONDURAS—Status: Colony.

Capital: Belize (pop. 1953: 30,000).

Governor: Sir Colin Thornley.

Chief exports (1956): mahogany (24%), pine.

Agricultural products: bananas, sugarcane, citrus fruits.

Forest products: cedar lumber and mahogany lumber, logs, pine lumber, chicle.

British Honduras is bounded on the north by Mexico and on the west and south by Guatemala. It was settled in 1663 by woodcutters from Jamaica. An irregular form of local government continued until 1871, when it became a Crown colony. It was separated from Jamaica in 1884. The Governor is assisted by an Executive Council and by a partially elected Legislative Assembly. A new constitution will permit the people to elect their own Prime Minister.

The colony's economy is dependent on timber and other forest exports. Agriculture has never been adequately developed.

Canada

ber of Commonwealth of Nations)
 a (land only): 3,619,616 square miles.*
 ulation (1959): 17,442,000 (1951:
 h 48%; French 31%; German 4%;
 nian 3%; others 14%).
 sity per square mile: 4.8.
 er: Queen Elizabeth II.
 ernor General: George P. Vanier.
 ne Minister: John Diefenbaker
 nicipal cities (census 1956): Mont-
 1,109,439 (seaport); Toronto, 667,706
 nufacturing center); Vancouver, 365,-
 Pacific seaport); Winnipeg, 255,093
); Hamilton, 239,625 (iron and
 ; Edmonton, 226,002 (petroleum);
 a, 222,129 (capital); Calgary, 181,780
 ing); Quebec, 170,703 (seaport);
 or, 121,980 (automobiles).
 etary unit: Canadian dollar.
 gions (census 1951): Roman Catholic
 United Church 20%; Anglican 15%;
 yterian 6%; Baptist 4%; others 12%.
 al area, including water: 3,845,774 square miles.

STATUS IN THE WORLD TODAY

Canada, like the United States, has
 ed from its prewar isolation and,
 nger a small power, has become an
 ely active member of the group of
 World nations. Since 1945 the corner-
 of its foreign policy has been sup-
 f the U.N. In world politics it moves
 ee areas: the Commonwealth, NATO,
 he Americas.

n the Canadian point of view, the
 onwealth maintains a bridge to Asia
 frica from the Western world and
 essens Canadian dependence upon
 United States. NATO affords a perfect
 work in which to use Canada's rela-
 small population and relatively great
 es in conjunction with those of
 he United Kingdom and the United

It also, by means of its European
 ers, gives Canada associates whose
 ers do something to offset the power
 two great members. And in the
 as, with the possibility of attack
 rth America across the Arctic, Can-
 ad and the United States have set up a
 nent Joint Defense Committee. This
 ught about the construction of the
 t Early Warning (DEW) line of
 nstallations and the creation of the
 American Air Defense command
 D).

adian membership in the U.N. and
 Security Council, has been marked
 uickness to attempt to bring dis-
 into the hands of the U.N. Its ac-
 a calling for intervention by the
 a the dispute between Nationalist
 d China over Quemoy and Matsu
 is an example of Canada's prefer-
 r action by the U.N. instead of ac-
 one or more of the great powers.

At the time of the attack on Suez, Can-
 ada's reaction was to attempt to restore
 peace and to preserve the Commonwealth,
 whose Asian members were overwhelmingly
 on the side of Egypt. Its actions procured
 first the dispatch of Mr. Hammarskjöld to
 Egypt and then the provision of the United
 Nations Emergency Force to restore the
 frontiers on which the fighting began and
 to set a screen between the belligerents.

In the recent Canadian elections, there
 were distinct anti-American overtones. The
 amount of American capital investment,
 the control of American branch factories
 by American head offices and the excess of
 American imports over Canadian exports
 to the United States are a matter of con-
 cern to many Canadians who are not nec-
 essarily anti-American in sentiment. They
 merely wish to insure Canadian control
 of the country's economic development by
 a judicious diversification of foreign in-
 terests in Canada and of Canadian exter-
 nal trade. A desire to solve some of these
 differences prompted the visit of President
 Eisenhower to Ottawa in July, 1958, and
 the setting up of joint committees of the
 American and Canadian cabinets and of
 Congress and Parliament. If these bodies
 can function, they may contribute not
 merely to a better understanding between
 the governments and legislatures of the
 two countries, but also their more effec-
 tive co-operation in continental defense
 and in world politics.

HISTORY. The Norse explorer Leif Ericsson
 probably reached the shores of Canada
 (Labrador or Nova Scotia) in A.D. 1000, but
 the history of the white man in the coun-
 try actually began in 1497, when John
 Cabot, an Italian in the service of Henry
 VII of England, reached the shore of New-
 foundland or Nova Scotia. Canada was
 taken for France in 1534 by Jacques Car-
 tier. The actual settlement of New France,
 as it was then called, began in 1604 at Port
 Royal in what is now Nova Scotia; in 1608
 Quebec was founded. France's colonization
 efforts were not very successful, but French
 explorers by the end of the seventeenth
 century had penetrated beyond the Great
 Lakes to the western prairies and south
 along the Mississippi to the Gulf of Mex-
 ico. Meanwhile, the English Hudson's Bay
 Company had been established in 1670. Be-
 cause of the valuable fisheries and fur
 trade, a conflict developed between the
 French and English; in 1713, Newfound-
 land, Hudson Bay, and Nova Scotia
 (Acadia) were lost to England.

During the Seven Years' War (1756-63),
 England extended its conquest, and the
 British general, Wolfe, won his famous
 victory over Montcalm outside Quebec
 (Sept. 13, 1759). The Treaty of Paris
 (1763) put Canada under English control.

PROVINCES AND TERRITORIES

Province	Land area, sq. mi.	Population (Census 1959)
Alberta	248,800	1,243,000
British Columbia	359,279	1,570,000
Manitoba	219,723	885,000
New Brunswick	27,473	590,000
Newfoundland	152,734	449,000
Nova Scotia	20,743	716,000
Ontario	363,282	5,952,000
Prince Edward Island	2,184	102,000
Quebec	523,860	4,999,000
Saskatchewan	237,975	902,000
Territories		
Northwest Territories	1,258,217	21,000
Yukon	205,346	13,000

Provinces	Capital	Premier, 1959
Alberta	Edmonton	Ernest C. Manning ¹
British Columbia	Victoria	William Bennett ¹
Manitoba	Winnipeg	Duff Roblin ²
New Brunswick	Fredericton	Louis J. Robichaud ³
Newfoundland	St. John's	Joseph Smallwood ³
Nova Scotia	Halifax	Robert L. Stanfield ²
Ontario	Toronto	Leslie Frost ³
Prince Edward Island	Charlotte-town	Walter R. Shaw ²
Quebec	Quebec	Jean Lesage ³
Saskatchewan	Regina	T. C. Douglas ⁴
Territories		
Northwest Territories	Ottawa	R. G. Robertson*
Yukon	Whitehorse	F. H. Collins*

¹ Social Credit; ² Progressive-Conservative; ³ Liberal; ⁴ Cooperative Commonwealth Federation.

* Commissioner.

At that time the population of Canada was almost entirely French, but in the next few decades thousands of British colonists emigrated to Canada from the British Isles and from the American colonies. In 1849 the right of Canada to self-government was recognized. By the British North America Act of 1867, the Dominion of Canada was created through the confederation of Upper and Lower Canada, Nova Scotia, and New Brunswick. Prince Edward Island joined the Dominion in 1873. In 1869 Canada had purchased from the Hudson's Bay Company the vast middle west (Rupert's Land) from which the provinces of Manitoba (1870), Alberta, and Saskatchewan (1905) were later formed. In 1871 British Columbia joined the Dominion. The country was linked from coast to coast in 1885 by the Canadian Pacific Railway.

During the formative years between 1840 and 1896, the Conservative party, led by John A. Macdonald, governed the country except during the years 1873-78. In 1896 the Liberal party took over and under Wilfrid Laurier, an eminent French Canadian, ruled until 1911. In World War I more than 500,000 Canadian soldiers fought for the Allied cause. After the Treaty of Versailles, Canada, a full-fledged nation, was admitted to the League of Nations and appointed its own representatives in foreign countries. By the Statute of Westminster (1931) the British Dominions, including Canada, were formally declared to be partner nations with Britain, "equal in status, in no way subordinate to each other," and bound together only by allegiance to a common Crown.

Newfoundland became Canada's tenth province on March 31, 1949, following a plebiscite held July 22, 1948, in which the people voted by a narrow margin to unite with Canada.

GOVERNMENT. Canada, a self-governing member of the Commonwealth of Nations, is a federal union of ten provinces whose powers are laid down in the British North America Act of 1867. The executive power nominally rest in the hands of the Governor General, who represents the Queen and is appointed by her upon the recommendation of the Canadian government.

Actually the Governor General acts in accordance with the advice of the Canadian Prime Minister and the members of the Cabinet who at the same time sit in the bicameral Parliament. The Parliament has two houses: a Senate numbering 102 members appointed for life, and a House of Commons numbering 265 members apportioned according to provincial population. Elections are held at least every five years, whenever the party in power is voted out in the House of Commons or considers it expedient to appeal to the people. The Prime Minister is the leader of the majority party in the House of Commons. Laws must be passed by both houses of Parliament and signed by the Governor General in the Queen's name.

The ten provincial governments are nominally headed by Lieutenant Governors appointed by the federal government, but the executive power in each actually is vested in a Cabinet headed by a Premier, who is leader of the majority party. In nine of the ten provinces the legislature is composed of a one-house assembly elected by the people for four years. In Quebec there is a second chamber, the Legislative Council, composed of nominees of the Provincial Government.

Judicial System. The judicial system consists of a Supreme Court in Ottawa (established in 1875), with appellate jurisdiction over all the provinces.

n, and a Supreme Court in each province as well as country courts with limited jurisdiction in most of the provinces. The Governor General in Council appoints the Justices of these courts.

ECONOMIC CONDITIONS. Agriculture. Agriculture, including horticulture, fruit raising, and the raising of stock and poultry, is the largest single industry. Canada is one of the world's greatest agricultural exporting countries; production is concentrated in Manitoba, Saskatchewan, and Alberta.

Cattle raising and dairy farming have increased greatly since 1920. Ontario and Quebec are the most important dairying provinces. On June 1, 1959, Canada had 11,120,000 cattle, 6,164,000 hogs, 1,761,000 sheep, and 24,000 horses.

Canadian manufactures rely heavily on domestic raw materials; growing industries which depend largely on raw materials imported in a raw or semiprocessed state include the manufacture of automobiles, sugar, and rubber goods, as well as the iron and steel industry in Nova Scotia, Quebec, and Ontario. The latter two provinces account for more than 80% of Canadian manufactures. The abundance of cheap hydroelectric power is one of the chief factors in the growth of Canadian industry. In 1956 there were 37,428 plants employing 1,359,000 persons. The most important industries in terms of output were pulp and paper, nonferrous-metals smelting and refining, petroleum products, meatpacking, automobiles, and sawmill products.

Canada is one of the great trading nations of the world. The bulk of its foreign commerce is in raw or semi-finished products.

In 1958, Canada's principal customers were the United States (58.6%), Britain (16.1%), West Germany (4.2%), Japan (2.2%), and India (1.6%). Leading suppliers were the United States (68.6%), Britain (10.1%), Venezuela (4.0%), West Germany (2.0%), and Japan (1.4%). Leading exports were newsprint (15%), wheat (8%), wood pulp (6.0%), planks and boards (5.8%), and nickel (5.1%). Leading imports in 1958 were machinery (non-farm) (10%), automobile parts (4.6%), crude petroleum (5.3%), rolling-mill products (steel) (2.8%), farm implements and machinery (3.6%), and petroleum products (3%).

Communications. Because Canada's exports are to a large extent bulky raw materials, cheap water transportation is essential. The country's system of canals, especially those connecting the Great Lakes, forms an integral part of the inland communications system.

NATURAL FEATURES AND RESOURCES. Covering most of the northern part of the North American continent and with an area larger than that of the United States, Canada's topography is extremely diversified. The northeastern region, including most of Quebec, northern Ontario and Manitoba, and the Northwest Territories, with Hudson Bay in the center, is an important source of minerals, wood pulp, and water power. In the east the mountainous maritime provinces have an irregular coast line on the Gulf of St. Lawrence and the Atlantic. The St. Lawrence plain, covering most of southern Quebec and Ontario, and the interior continental plain, covering southern Manitoba and Saskatchewan and most of Alberta, are the principal cultivable areas. They are separated by the Canadian Shield.

Canadian Governors General and Prime Ministers Since 1867

	Governor General	Term	Prime Minister	Party
1869	Viscount Monck	1867-1873	Sir John A. Macdonald	Conservative
1872	Baron Lisgar	1873-1878	Alexander Mackenzie	Liberal
1878	Earl of Dufferin	1878-1891	Sir John A. Macdonald	Conservative
1883	Marquess of Lorne	1891-1892	Sir John J. Abbot	Conservative
1888	Marquess of Lansdowne	1892-1894	Sir John S. D. Thompson	Conservative
1893	Baron Stanley	1894-1896	Sir Mackenzie Bowell	Conservative
1898	Earl of Aberdeen	1896(2 mos)	Sir Charles Tupper	Conservative
1904	Earl of Minto	1896-1911	Sir Wilfrid Laurier	Liberal
1911	Earl Grey	1911-1917	Sir Robert L. Borden	Conservative
1916	Duke of Connaught	1917-1920	Sir Robert L. Borden	Unionist
1921	Duke of Devonshire	1920-1921	Arthur Meighen	Unionist-National
1926	Viscount Byng			Conservative
1931	Viscount Willingdon	1921-1926	W. L. Mackenzie King	Liberal
1935	Earl of Bessborough	1926(3 mos)	Arthur Meighen	Conservative
1940	Baron Tweedsmuir	1926-1930	W. L. Mackenzie King	Liberal
1946	Earl of Athlone	1930-1935	Richard B. Bennett	Conservative
1952	Viscount Alexander	1935-1948	W. L. Mackenzie King	Liberal
1959	Vincent Massey	1948-1957	Louis St. Laurent	Liberal
	George P. Vanier	1957-	John Diefenbaker	Conservative

rated by a forested plateau rising from Lakes Superior and Huron. Westward toward the Pacific, most of British Columbia, Yukon, and part of western Alberta are covered by parallel mountain ranges including the Rockies. The Pacific border of the coast range is ragged with fiords and channels. The highest point in Canada is Mt. Logan, 19,850 ft., located in the Yukon.

Canada has an abundance of large and small lakes. In addition to the Great Lakes on the United States border, there are nine others which are more than 100 miles long and 35 which are more than 50 miles long.

The two principal river systems are the Mackenzie and the St. Lawrence. The St. Lawrence, with its tributaries, is navigable for over 1,900 miles and is the commercial artery of eastern Canada.

As most of the Canadian rivers have waterfalls on their courses they are of considerable importance as sources of power.

Minerals. Canada's mineral resources are both rich and varied. Mining production in 1956 was valued at \$2,067,699,096. Metals come mainly from two widely separated regions, the mountain ranges of the Pacific coast and the province of Ontario. Copper ore also exists in Quebec, Manitoba, and Newfoundland. Production of petroleum centers in Alberta. There are deposits of uranium in the Northwest Territories.

Forests and Fisheries. The total area of land covered by forests is estimated at 1,300,000 square miles, of which only 435,000 are productive and accessible. The manufacture of pulp and paper is one of the leading industries.

Fishing, Canada's oldest industry, is carried on along the Atlantic and Pacific coasts and on the inland lakes.

FALKLAND ISLANDS AND DEPENDENCIES—Status: Crown Colony.

Governor: Sir Edwin P. Arrowsmith.

Capital: Stanley (population 1,135).

This sparsely inhabited Crown colony consists of a group of islands in the south Atlantic about 250 miles east of the South American mainland. Dependencies include all islands and Antarctic territory between 20° and 50° w. long., south of 50° s. lat., and between 50° and 80° w. long., south of 58° s. lat. The chief industry is sheep raising, and apart from the production of wool, hides and skins, and tallow, there are no known resources. The whaling industry is carried on from South Georgia Island.

The islands were discovered by John Davis in 1592.

JAMAICA AND DEPENDENCIES—Status: Colony.

Capital: Kingston (population 145,000).

Governor: Sir Kenneth Blackburne.

Chief Minister: Norman W. Manley.

Foreign trade (1956)*: exports (49% to

Britain); imports (37% from Britain). Chief exports: sugar and preparations (34%), bananas (14%), bauxite (12%).

Agricultural products: sugar, rum, bananas, citrus fruits, ginger, coffee, mento.

Mineral: bauxite.

* Excluding dependencies.

Jamaica, the largest island in the British West Indies (4,470 sq. mi.), is eighty miles south of the eastern end of Cuba. Its land dependencies include the Turks and Caicos Islands (about 600 mi. N.E.), the Man Islands (about 300 mi. N.W.) and uninhabited cays. It was discovered by Columbus in 1494 and remained in Spanish possession until 1655, when it was taken by the British. According to the Constitution of Nov. 20, 1944, as amended in 1953, the Governor is assisted by a House of Representatives, a Legislative Council (upper house), and an Executive Council, of which the Chief Minister is appointed by the Governor subject to approval of the House.

Sites were leased for 99 years to the U.S. in 1940 for naval and air bases.

The colony's economy depends on agriculture, and about 200,000 acres are under cultivation. Sugar took the place of bananas as the chief crop during World War II. Jamaica is virtually the sole source of pimento.

LEEWARD ISLANDS—Status: Group of colonies.

Chief export: sugar.

Agricultural products: sugar, cotton, coconuts, citrus fruits, tobacco.

The Leeward Islands, lying southeast of Puerto Rico, are a group of four colonies: Antigua (108 sq. mi.) and dependencies (10 sq. mi.); Virgin Islands (87 sq. mi.); Kitts, Nevis and dependency (152 sq. mi.); and Montserrat (33 sq. mi.). They are governed separately, each under an administrator.

In 1940, the United States acquired a 99-year lease on sites for a naval and air base on Antigua. The islands are agricultural.

TRINIDAD AND TOBAGO—Status: Colony.

Capital: Port of Spain (population 100,000).

Governor: Sir Solomon Hochoy.

Chief Minister: Dr. Eric Williams.

Foreign trade (1956): exports (35% to Britain); imports (35% from Britain). Chief exports: crude petroleum and products (66%), sugar (8%), cacao (3%).

Agricultural products: raw sugar, coconuts, citrus fruit.

Manufactures: petroleum products.

Minerals: crude petroleum, asphalt.

The islands of Trinidad and Tobago are sixteen and twenty-one miles, respectively, off Venezuela just north of the Orinoco delta.

Both were discovered by Columbus in 1498 and remained Spanish possessions until 1797, when the British took them. They are administered by a Governor, assisted by an Executive Council and a Legislative Council, popularly elected. In 1941 the United States was granted 99-year leases on the islands for naval and air

soil is rich for the growing of tropical products; sugar and cacao are the principal crops. Trinidad is one of the leading producers of the Commonwealth, and the world's most notable source of bauxite, found in Pitch Lake, thirty-eight miles southeast of Port of Spain.

WEST INDIES FEDERATION: established Jan. 3, 1958, it includes Antigua, Barbados, Dominica, Grenada, Jamaica, Guyana, Surinam, Trinidad and Tobago, St. Vincent, and St. Kitts-Nevis. It is expected to attain Commonwealth status within five years. Prime Minister Herbert Phillips was chosen April 18, 1958.

In the March, 1958, elections, the Federal (Socialist) party obtained twenty-two seats, Democratic Labor (Anti-Socialist) party twenty-one, Barbados National (pro-Socialist) one in the new West Indian Parliament.

WESTWARD ISLANDS—Status: Group of islands.

Cultural products: arrowroot (St. Vincent), nutmeg (Grenada), mace (Grenada), cacao.

The islands, four in number, form the northern portion of the Lesser Antilles in the Caribbean; they extend approximately 100 miles from the French colony of Guadeloupe to the north to the British colony of Trinidad to the south. Their total area of about 820 square miles divides as follows: Dominica, 304; St. Lucia, 196; St. Vincent, 150; Grenada, 133. The islands are not federated and are administered by different administrators.

Culture is the only industry. St. Vincent has a virtual monopoly on the supply of arrowroot.

ASIA

Yemen—Status: Colony and Protectorate. Governor: Sir William Luce.

Foreign trade: exports (16% to Britain); imports (30% from Kuwait). **Manufactures:** crude petroleum refined.

The British colony and protectorate of Aden is situated on the volcanic southern tip of the Arabian peninsula, along the Gulf of Aden. The colony (port) of Aden was annexed to Britain in 1839 and was part of the Bombay Presidency until 1932, when it became a separate province with a Resident Commissioner responsible to the

Indian government. In 1937 it was transferred from Indian to Imperial control as a Crown colony. It is administered by a Governor and Commander-in-Chief, aided by an Executive Council and a Legislative Council. The 20-odd Sultans who rule their respective territories in the protectorate are responsible to him.

Aden colony is essentially a transshipment point and bunkering station and is also the commercial center for the Yemen and the African coast opposite. Aden airport is a station on the Khartoum-Karachi air route. Agriculture is unimportant except for some coffee and tobacco, and except for the large petroleum refinery of the British Petroleum Co., Ltd. (formerly Anglo-Iranian Oil Co.), which went into operation in 1954, manufacturing activity is limited to salt, cigarettes, and dhows.

BORNEO

COLONY OF NORTH BORNEO—Status: Colony.

Capital: Jesselton (population 11,704).

Governor: Sir Wm. Goode.

Foreign trade (1956)*: exports (23% to Britain); imports (24% from Britain). **Chief exports:** rubber (33%), timber (22%), copra (19%).

Agricultural products: rubber, rice, copra.

Forest products: timber, cutch, rattans.

* Excluding transit trade.

The Colony of North Borneo, constituting the extreme northern portion of the island of Borneo, consists largely of highlands and occasional open valleys and plateaus. The territory was a British protectorate administered under a royal charter by the British North Borneo Company from 1881 until July 15, 1946, when it assumed the status of a Crown colony. It was occupied by Japanese troops from 1942 until 1945. Labuan (pop. 9,000; area, 35 sq. mi.), a small island off the North Borneo coast, was transferred from the jurisdiction of the Straits Settlements to that of North Borneo in 1946.

The population is comprised largely of aborigines living on a primitive cultural level. In 1951, 72.7 per cent of the population was native, 22.3 per cent Chinese; there were 1,213 Europeans. Mineral resources are believed to be considerable, but the colony's income is based on agricultural and jungle produce.

BRUNEI—Status: Protectorate.

Capital: Brunei (population 16,000).

Sultan: Omar Ali Saifuddin.

High Commissioner: D. C. White.

Foreign trade: Chief export: petroleum (99%).

Agricultural products: rice, rubber.

Mineral: petroleum.

Brunei lies on the northwestern coast of Borneo, entirely surrounded by Sarawak. It

COLOMBO PLAN

The Colombo Plan, started among Commonwealth countries of Southeast Asia in 1950, focuses attention on recipient rather than donor. Its objective is to improve living standards of economically underdeveloped countries by coordinating their approach to foreign economic aid. Substantial contributions have been made by the U.S., the U.K., Australia, New Zealand and the International Bank for Reconstruction and Development.

was placed under British protection in 1888, and in 1906 a treaty was concluded whereby the native Sultan yielded administration of the state to a British Resident. The Governor of Sarawak was appointed High Commissioner for Brunei in 1948. Japanese occupied Brunei in 1942-45.

Most of the inhabitants are Malays and Borneans; in 1955, 19% were Chinese and only 1.5% European. The bulk of the population lives in and around the capital, situated on the Brunei River 9 miles from its mouth. The interior is largely forested and contains rich timber. All petroleum is exported to Sarawak for refining.

SARAWAK—Status: Colony.

Capital: Kuching (population 56,000).

Governor: Sir Alexander Waddell.

Foreign trade. Chief exports: petroleum and products (73%), rubber (14%), pepper (5%).

Agricultural products: rubber, pepper, copra, rice.

Minerals: petroleum, gold, silver, coal.

Sarawak extends along the northwestern coast of Borneo for about 500 miles. In 1841 part of the present territory was granted by the Sultan of Brunei to Sir James Brooke. The state, enlarged by additional concessions made between 1861 and 1905, continued to be ruled by members of the Brooke family until the Japanese occupation in Dec. 1941. A British protectorate since 1888, Sarawak became a Crown colony July 15, 1946, through agreement between the British government and the then-ruling Rajah, Sir Charles Vyner Brooke.

The colony is mountainous and well watered; inland communication is largely by water. Most of the inhabitants are Malays, Dyaks, and Chinese. The most important mineral is petroleum, which was discovered at Miri in 1909 and subsequently worked by Sarawak Oilfields, Ltd. In 1958 57,840 metric tons were produced. There are also important forest resources.

Population (est. July 1, 1958): 9,380,000 (1953: Sinhalese, 69%; Tamil, 21%; Malays, 6%; Burghers and Eurasians, .5%; Europeans, [6,909] and others, 3.5%).

Density per square mile: 370.6.

Ruler: Queen Elizabeth II.

Governor General: Sir Oliver Goonewardene.

Prime Minister: Mrs. Sirimavo Bandaranaike.

Principal cities (census 1953): Colombo, 426,127 (capital); Dehiwala—Mt. Lavinia, 78,213 (suburb of Colombo).

Monetary unit: Ceylonese rupee.

Languages: English, Sinhalese, Tamil.
Religious (est.): Buddhist, 61%; Hindu, 22%; Moslem, 7%; Christian (mainly Roman Catholic), 9%; others, 1%.

STATUS IN THE WORLD TODAY

A self-governing dominion in the British Commonwealth of nations, Ceylon was one of the most genuinely pro-Western nations among the newly independent nations of Asia. But when it could not export rubber and other exports in Western markets at prices which would pay for necessary imports of foodstuffs, it began to shift toward a neutralist policy, which led to the first (in 1952) of a series of trade agreements with the Soviet bloc providing for the exchange of rubber for rice.

Ceylon depends upon three products—tea, rubber, and coconuts—to finance food imports, since domestic production provides less than half the minimum needs. But rubber and coconut prices on the world market fluctuate more widely than those of almost any other products, while tea, more stable, has recently shown price variations up to 11 per cent. Therefore Ceylon cannot control its livelihood by diversify and develop its economy, a policy adopted in 1947 the first of the Six-Year Plans to develop new crops and expand secondary industry. When it failed to measure up to the goals set, Ceylon sought the help of an International Bank mission in 1951 to formulate a comprehensive Six-Year Investment Program for 1954-1960, calling for a total expenditure of \$531 million.

Faced with a dense population due to its economic difficulties, Ceylon also has a serious ethnic problem. Over 70 per cent of the population are Sinhalese, principally Buddhists. Another 21 per cent are Tamil-speaking Hindus of South Indian extraction. More than half of these are called Ceylon Tamils, descendants of 19th-century invaders, who enjoy full equality with the Sinhalese. The rest are Indian Tamils, were brought over as labor by the British or are more recent arrivals. They are not especially wanted by the Sinhalese and only half of them are eligible for citizenship. The Sinhalese

Ceylon

(Member of Commonwealth of Nations)

Area: 25,332 square miles.

istic-religious conflict erupted into communal rioting in May and June of 1946, in which hundreds of lives were lost. As a result of the unrest, the government formed two extreme communalist parties, the Tamil and one Sinhalese.

RELIGION AND GOVERNMENT. Known to the Greeks and Romans as Taprobane and to the Mohammedan seamen as Serendib, Ceylon is reputed to have been invaded from India in 504 B.C. by Vijaya, the first Sinhalese. Buddhism was introduced in the 3rd century B.C. In subsequent centuries the island was invaded and occupied several times by Indian princes.

Ceylon became a full-fledged, self-governing dominion on Feb. 4, 1948, with D. S. Senanayake as Prime Minister. On March 22, 1952, his son Dudley Senanayake resigned and on Oct. 12, 1952, he was succeeded by Sir John Kotelawala. The leftist People's United Front won the April, 1956, elections and S. W. R. D. Bandaranaike, formed a new government on Apr. 12. Bandaranaike was assassinated Sept. 26, 1959, and Wijaya Dahanayake became Prime Minister.

Under the 1946 Constitution, Ceylon's government is headed by the Crown-appointed Governor General, who is advised by a Council of Ministers headed by the Prime Minister. The bicameral Parliament consists of a House of Representatives of 100 members, and a Senate of 30 members. Half of the senate is nominated by the cabinet and the other half elected by the House of Representatives.

ECONOMIC CONDITIONS. Ceylon is heavily dependent on food imports, particularly rice, the staple food. A large area of the cultivated land (25 per cent of total area) is devoted to the chief exports—tea, rubber, and coconut products, all of which are grown for the most part on plantations. Other crops include sugarcane, cinnamon, and citronella.

Major exports are tea, rubber, and coconut oil. Leading customers are Britain (30%), sterling area (13%), the United States and Canada (13%), and EPU countries (9%); leading suppliers, Britain (30%), India (13%), other sterling area countries (9%), and Canada (6%).

PHYSICAL FEATURES AND RESOURCES. The island is flat, but mountains in the south rise to 8,000 feet. The island extends to a maximum of 270 miles north-south, and 140 miles east and west. Natural resources include graphite (Ceylonite), gem stones, mica, magnesite, monazite, uranium; uranium deposits have been reported.

HONG KONG—Status: Colony.

Capital: Victoria (population 1,000,000).

Governor: Sir Robert Black.

Foreign trade: Chief export: textiles.

Agricultural products: rice, sugar cane.

Major industries: shipbuilding, rope making, cement, sugar refining, textiles.

The colony of Hong Kong comprises the island of Hong Kong (32 sq. mi.), Stonecutters' Island, and the Kowloon peninsula and the New Territories on the adjoining mainland. The island of Hong Kong, located at the mouth of the Canton River about ninety miles southeast of Canton, was ceded to Britain in 1841.

Stonecutters' Island and Kowloon were annexed in 1860, and the New Territories, which are mainly agricultural lands, were leased from China in 1898 for ninety-nine years. Hong Kong was attacked by Japanese troops Dec. 7, 1941, and surrendered the following Christmas Day. It remained under the occupation of the Japanese until September, 1945.

Possessing an excellent natural harbor seventeen miles in extent, the only safe deep-sea anchorage between Shanghai and Indo-China, Hong Kong is the entrepôt for trade throughout southern China and the western Pacific.

The cities of Victoria and Kowloon contain the greater part of the population, which is overwhelmingly Chinese. Besides those Chinese engaged in agriculture or industry, a large population lives in sampans or junks either in Victoria Harbour or neighboring bays, supporting itself by fishing or by performing labor on the wharves.

India (Republic)

(Member of Commonwealth of Nations)

Area: 1,269,640 square miles.*

Population (est. 1959): 402,750,000.* (Hindu, 85%; Moslem, 9.9%; Christian, 2.3%; Sikh, 1.7%; others [Jain, Buddhist, Zoroastrian, Jewish, etc.], 1.1%).

Density per square mile: 317.2.

President: Rajendra Prasad.

Prime Minister: Pandit Jawaharlal Nehru.

Principal cities (census 1951): Bombay, 2,839,270 (seaport; cotton and textiles); Calcutta, 2,548,677 (chief port); Madras, 1,416,056 (seaport); Hyderabad, 1,085,722 (trade center); Delhi, 914,973 (manufacturing); Ahmedabad, 788,333 (manufacturing); Bangalore, 778,977 (manufacturing); Kanpur (Cawnpore), 705,383 (textiles); New Delhi, 276,314 (capital).

Monetary unit: Rupee.

Principal languages: Hindi (official), English†, Bengali, Assamese, Gujarati, Kannada, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, Telugu, Urdu.

* Including Jammu and Kashmir; status in dispute with Pakistan. † To be used for all official purposes until 1965.

STATUS IN THE WORLD TODAY

India, a sovereign democratic republic which still retains membership in the British Commonwealth of Nations, is the leader of the neutralist bloc of nations in the current cold war. One reason is the determination of Prime Minister Jawaharlal Nehru that India should have the position and play the role of a great power in world affairs. A second is that through mediation and compromise it hopes to become a third force, or bridge, between the East and the West power blocs. A third factor is invariable opposition, inherited from colonial days, to imperialism, but usually only of the Western variety, and a consequent innate suspicion of the West.

Thus India was among the leaders who demanded that France and Great Britain obey the United Nations mandate to withdraw from the Suez Canal during the 1956 attack, although the Indian government itself has refused to obey U.N. decisions in its dispute with Pakistan over Kashmir. Only belatedly, and in part forced by domestic public opinion as much as by loss of face in the non-Soviet world, did official India also speak out against the brutal Soviet oppression of the Hungarian revolt in the same year. Although it had agreed in June, 1954, with Communist China on the "five principles of peaceful coexistence," its reaction when Red China violated these principles in overthrowing the autonomous government of Tibet in 1959 was one of comparative mildness, even though Peiping charged that a Tibetan revolt had been planned in India. It did, however, give asylum to the deposed Dalai Lama. It faces the prospect of frontier troubles with its huge northern neighbor. Parts of India are already shown as belonging to Red China on maps which have been published in Peiping, and in 1960 it was disclosed that Red China had completed a base and a strategic road inside territory considered Indian before India ever heard of the project. Premier Chou En-lai came to India in April, 1960, for a week of talks about the frontier disputes, but the visit ended in failure to achieve any agreement.

But because of the abject poverty which exists in India, the average illiterate Indian is too much concerned with eking out a mere existence even to think about his country's foreign policies. And to this problem of mass poverty, as India's Planning Commission described it, the government has turned most of its attention. Although like all other undeveloped countries India was fascinated by steel mills and power plants as symbols of industrial development, the core of its first Five-Year Program, started April 1, 1951, was agriculture, irrigation, land reclamation, and community development. It was in many

ways a material success, and was accomplished with Western aid totaling million. Not until a year before the of the program did the U.S.S.R. enter picture with an offer to build and a steel mill on terms more favorable those hitherto secured from the West.

For its second Five-Year Plan, scheduled to end in 1961, allocations to all parts of the economy have been vastly increased and the emphasis upon direct industrialization sharply stepped up. India expects to finance this program mainly from internal resources, but still required \$1,000 millions in external assistance. Most of this sum has been granted from Western sources. The total cost is estimated at \$9,600 millions, or double the amount of the first Plan.

HISTORY. The Aryans or Hindus who invaded India between 2400 and 1500 B.C. from the northwest found a land already well civilized. Buddhism was founded in the sixth century B.C. and spread throughout northern India. The first exact date in Indian history is 327 B.C., when Alexander the Great invaded India. Meanwhile India continued to be divided into rival states.

In 1526, Mohammedan invaders founded the great Mogul empire, centered on Delhi, which lasted at least in name until 1858. Akbar the Great (1542-1605) strengthened this empire and became the ruler of a greater portion of India than had any before acknowledged the suzerainty of the emperor. The long reign of his great-grandson, Aurangzeb (1658-1707) represents both the culmination of Mogul power and the beginning of its decay.

Vasco da Gama, the Portuguese explorer, visited India first in 1498, and for the next hundred years the Portuguese had a virtual monopoly on trade with the subcontinent. Meanwhile, the English founded the India Company, which set up its first factory at Surat in 1612 and began expanding its influence, fighting against the Dutch rulers and the French, Dutch, and Portuguese traders simultaneously.

Bombay, taken from the Portuguese, came to be the seat of English rule in 1687 after the defeat of French and Moslem forces by Lord Clive in the decade ending 1760. It laid the foundation of the British Empire in India. From then until 1858, when the administration of India was formally transferred to the British Crown following the great mutiny of native troops in 1857, the East India Company was constantly preoccupied with the suppression of native risings and the extension of British rule.

After World War I, in which the Indian states sent more than 1,000,000 soldiers to fight beside the Allies, Indian nationalism

POLITICAL SUBDIVISIONS OF REPUBLIC OF INDIA, 1959

	Area, sq. mi. (approx.)	Population, census 1951*
Uttara Pradesh..	105,700	31,260,133
Uttar Pradesh..	85,062	9,043,707
Uttar Pradesh..	67,113	38,783,778
Uttar Pradesh..	190,668	48,265,221
Uttar Pradesh..	92,780	4,410,000
Uttar Pradesh..	14,937	13,549,118
Uttar Pradesh..	171,300	26,071,637
Uttar Pradesh..	50,174	29,974,936
Uttar Pradesh..	74,861	19,401,193
Uttar Pradesh..	60,250	14,645,946
Uttar Pradesh..	47,062	16,134,890
Uttar Pradesh..	132,098	15,970,774
Uttar Pradesh..	113,423	63,215,742
Uttar Pradesh..	33,885	26,302,386

Centrally Administered Territories

	Area, sq. mi. (approx.)	Population, census 1951*
Andaman and Nicobar Islands..	3,215	30,971
Delhi	573	1,744,072
Himachal Pradesh	10,922	1,109,466
Laccadive, Minicoy and Amindive Islands	10	21,035
Manipur	8,629	577,635
Tripura	4,022	639,029

* Estimated on basis of census where territorial changes in unit have occurred since 1951. † Status in dispute with Pakistan.

rest rose to new heights under the leadership of a little Hindu lawyer, Mohandas K. Gandhi, called Mahatma. His tactics, of a politico-religious, called for non-violent revolts against British authority. He soon became the leading spirit of the All-India Congress which was the spearhead of Indian resistance against British rule. In 1919 the Congress gave added responsibility to Indian leaders, and by an act passed in 1935 India was given a federal form of government and a measure of self-rule.

During the 1940's the policy of both the coalition government of Britain and the Labour government envisaged partitioned India as a self-governing dominion including both British India and the native states. In 1942, with Japanese pressing hard on the eastern borders of India, the British war Cabinet decided to send Sir Stafford Cripps to India to try to reach a political settlement with nationalist leaders. The mission failed. Shortly thereafter the Congress took the position that the British should quit India. In August 1942, fearing civil disobedience, the government carried out widespread arrests of Congress leaders, including Gandhi.

Gandhi was released in May, 1944, and negotiations later. Negotiations for a settlement were resumed and they proved successful until the British Labour government sent a mission in 1946 which obtained the agreement of the Congress and Mohammed Ali Jinnah's Moslem League to a long-term plan for a Constituent Assembly on three separate groups of states with a minimal center. However, agreement was not reached on an interim constitution and the Moslem League later moved to its position of unconditional independence. Finally, in February, 1947, the government announced its deter-

mination to transfer power to "responsible Indian hands" by June, 1948, even if a new Constitution had not been worked out.

With the appointment at the same time of Lord Mountbatten as Governor-General, events moved swiftly. By early June, 1947, agreement was reached on the partitioning of India along religious lines (a plan previously opposed by the predominant Hindus and by Britain) and on the splitting of the provinces of Bengal and the Punjab, which the Moslems had claimed in their entirety.

The Indian Independence Act, passed quickly by both houses of the British Parliament, received royal assent on July 18, 1947, and on Aug. 15 the Indian Empire, united under British rule for almost a century, passed into history.

GOVERNMENT. India is now a sovereign republic within the Commonwealth of Nations—a status approved by the other Commonwealth nations at London in April, 1949, on the condition that India recognize the King as head of the Commonwealth. Under the Constitution adopted by the Constituent Assembly on Nov. 26, 1949, India has a parliamentary type of government. The constitutional head of state is the president, who is elected every five years. Dr. Rajendra Prasad has held this office continuously since January 26, 1950. He is advised by a prime minister and cabinet based on a majority of the bicameral parliament, which consists of a Council of States, representing the constituent units of the Republic, and a House of the People, elected every five years by universal adult (21 years) suffrage.

Native States. Most of the 560-odd native states and subdivisions of pre-1947 India acceded to the new nation, and the central government pursued a vigorous policy of integration. This took three

forms: (1) merger into adjacent provinces, (2) conversion into centrally administered areas, and (3) grouping into unions of states. Finally, under a controversial reorganization plan effective Nov. 1, 1956, the unions of states were abolished and merged into adjacent states, and India became a union of fourteen states and six centrally administered areas.

The status of the large princely state of Jammu and Kashmir on the northwest frontier is in dispute with Pakistan. It is 85 per cent Moslem, but its Hindu ruling prince acceded to India, which took over administration following invasion by Moslem troops in late 1947. The U.N. Security Council voted on April 21, 1948, to hold a plebiscite in the area, but it was never held. The part occupied by India was incorporated into India in Jan. 1957.

ECONOMIC CONDITIONS.

Leading customers in 1958 were Britain (29%), the United States and Canada (19%), and Japan (5%); leading suppliers, Britain (24%), the United States and Canada (23%), and continental EPU countries (22%). Leading exports were tea (24%), jute and bagging (16%), and cotton manufactures. Main imports included petroleum and products, machinery, raw cotton, and rice. By 1959 the U.S. had supplied \$1,792,700,000 of economic aid to India.

NATURAL FEATURES AND RESOURCES. The Indian republic contains a large part of the great Indo-Gangetic plain which extends from the Bay of Bengal on the east to the Afghan frontier and the Arabian Sea on the west. This plain is the richest and most densely settled part of the subcontinent. Another distinct natural region is the Deccan, a plateau of 2,000 to 3,000 feet elevation, occupying the southern portion of the subcontinent.

Forming a part of the republic are several groups of islands—the Laccadives (fourteen islands) in the Arabian Sea; the Andamans (204 islands) and the Nicobars (nineteen islands) in the Bay of Bengal.

India's three great river systems, all rising in the Himalayas, have extensive deltas. The Ganges flows south and then east for 1,540 miles across the northern plain to the Bay of Bengal; part of its delta, which begins 220 miles from the sea, is within the republic. The Indus, starting in Tibet, flows northwest for several hundred miles in Kashmir before turning southwest toward the Arabian Sea; it is important for irrigation in Pakistan. The Brahmaputra, also rising in Tibet, flows eastward first through India and then south into Pakistan and the Bay of Bengal.

Minerals. The republic has rich mineral resources. The most valuable is coal, deposited throughout most of the nation.

Assam and the Punjab produce diamonds. Other minerals include iron ore, monazite, diamonds, magnesite, uranium, zirconium, vermiculite, graphite, gypsum, tungsten ore, sapphires.

Malaya, Federation of

(Member of Commonwealth of Nations)

Area: 50,690 square miles.

Population (est. June 30, 1959): 6,590,000 (1947: Malayan, 49.5%; Chinese, 38.3%; Indian and Pakistani, 10.8%; other, 1.3%).

Density per square mile: 119.5.

Head of State: Sir Hisamuddin Ismail Shah.

Prime Minister: Tengku Abdul Rahman.

Principal cities (census 1958): Kuala Lumpur, 316,330 (capital); George Town, 234,855 (seaport); Ipoh, 125,855 (city); Klang, 75,687; Malacca, 69,865 (seaport); rubber, copra).

Monetary unit: Malayan dollar.

Languages: English, Malay, Chinese, Tamil.

Religions: Moslems (predominant), Christian, Buddhist.

STATUS IN THE WORLD TODAY

Despite a clear pro-Western bias in continuing close ties with the British, Malaya has generally pursued a neutral course and has declined to join the Southeast Asia Treaty Organization. It has followed this policy even though it has been torn by a Communist insurrection since 1948 which, although impossible to suppress completely, has now been reduced to little more than nuisance proportions. The situation still demands large-scale military effort and expense.

Malaya faces a unique racial problem. As a result of indiscriminate immigration in the past, the Malays have become a minority in their own land. Today nearly 40 per cent of the population are Chinese, 12 per cent are Indians and others. Little progress has yet been made toward integrating the several races into a unitary Malayan nation. The Malays, uneasy and wedded to their traditional, agrarian way of life, fear and resent the Chinese who have long since won a dominant position in the commercial life of the country. The ambitious, hardworking Chinese, in turn, are disgruntled over the favored political position which the Malays enjoy under the existing governmental set-up.

While the Federation is relatively poor off in comparison with most of its neighbors, the economic situation is held up by many incalculable factors. Malaya produces only a third of its food requirements.

, and its prosperity is dependent on the fluctuating world market for the country's two major exports, rubber and tin. Thus far relatively little progress has been made toward diversification and industrialization of the economy.

ROY AND GOVERNMENT. The Federation of Malaya consists of the states of Kedah, Kelantan, Negri Sembilan, Perak, Perlis, Selangor, and Trengganu and the former British settlements (colonies) of Malacca and Penang. Native states were brought under British administration by a process of commercial and political exploitation in the late nineteenth and early twentieth centuries.

As the result of agreements reached with the British government in 1956 and 1957, the Federation attained full independence and joined the Commonwealth on August 31, 1957. Sir Abdul Rahman was elected the first head of state, and Tengku Abdul Rahman (no relation) became prime minister.

Under the 1957 constitution Malaya is a constitutional monarchy within the Commonwealth of Nations, recognizing the Queen as head of the Commonwealth. The head of state is elected by the hereditary rulers of the states from among themselves for a 5-year term. He is assisted by the prime minister and his cabinet. Malaya has a bicameral legislature. The Federal Senate is partly appointed by the Head of State to represent the interests of the states and partly elected by the legislative assembly of the states. The House of Representatives, or Lower House, is made up of 104 elected members.

About 65% of the cultivated area is devoted to rubber, of which Malaya is one of the world's largest producers (664,000 tons annually). Other export crops include coconut oil, tea, and pineapples. Rice, the principal subsistence crop, falls far short of meeting local needs.

Major customers are Britain, the United States, and Japan; leading suppliers are Indonesia, Britain, and Thailand. Major exports are rubber and tin.

Malaya is rich in minerals. Tin, the most important, occurs throughout the country. Production is concentrated in Perak and Selangor. Other minerals include iron ore, bauxite, tungsten, and manganese.

Pakistan (Republic)

Member of Commonwealth of Nations)
364,737 square miles.

Population (estimated 1959): 86,823,000 (Moslem, 86%; Hindu, 13%; others, 1%). Density per square mile: 238.0.

President: Mohammed Ayub Khan.

Prime Minister: (Post abolished in October, 1958.)

Principal cities (est. 1958): Karachi, 2,000,000; (census 1951): Lahore, 849,476 (capital, West Pakistan); Dacca, 276,033 (capital, East Pakistan); Hyderabad, 241,801 (trade and rail center); Rawalpindi, 237,219 (capital).

Monetary unit: Pakistani rupee.

Principal languages: Bengali (official), Urdu (official), English,* Hindi, Punjabi.

* To be used for official purposes until 1976.

STATUS IN THE WORLD TODAY

Pakistan, an Islamic republic which is still a member of the British Commonwealth of Nations, is, unlike India, an open supporter of the West. It has joined the Baghdad Pact, is a member of SEATO (Southeast Asia Treaty Organization), and participates regularly in various activities arising from membership in the Commonwealth. It has also associated itself with the Afro-Asian bloc in the U.N. and was a sponsor of the twenty-nine-nation Bandung Conference in April, 1955. Its difficulties with Afghanistan over the border area of "Pushtunistan" have been, in part, smoothed over, as has its argument with India over division of the waters of the Indus River and its tributaries. But it is still embroiled in a bitter conflict with India over Kashmir, which it claims and which India has annexed, even though the dispute is technically before the U.N.

The nation is divided into two unequal parts separated by the 1,000-mile expanse of India: overcrowded East Pakistan, with more than half the population and only 15 per cent of the total land area, and West Pakistan, which has dominated the political life of the country since independence in 1947. Unlike most other ex-colonial nations, Pakistan had no prior existence except as fairly well-defined, predominantly Moslem areas within the great Indian subcontinent. Relations with India were also disturbed by savage communal riots between Moslems and Hindus which followed partition, and the vast transfers of population resulting from them.

Pakistan's economic difficulties as a new state have been heightened by internal political instability and the country's feeling that comparatively large defense expenditures (with U.S. military aid) were necessary because of its difficulties with India and Afghanistan. The first Five-Year Plan, started in 1955, brought little improvement in living standards but made some progress, particularly in the industrial field. The second plan envisages an outlay of \$4 billion, with \$1.7 billion of it from for-

ign aid. Manufacturing has accounted for a steadily rising share of the national income, and in certain consumer articles the country has achieved self-sufficiency and even an export potential. The plan's four objectives are: to raise national income and employment through industry, agriculture, and community development; to improve the balance of payments through raising exports and managing imports; to extend social services; and to pay special attention to some of Pakistan's more depressed areas, especially East Pakistan.

HISTORY AND GOVERNMENT. Pakistan, a self-governing member of the Commonwealth of Nations and one of the two successor states to British India, is the world's largest and most important Moslem state.

The history of Pakistan prior to 1947 is principally that of India (*see* India). Upon the transfer of power on Aug. 15, 1947, Mohammed Ali Jinnah became the first Governor General; he died on Sept. 11, 1948, and was succeeded by Khwaja Nazimuddin. The latter became Prime Minister upon the assassination of Liaquat Ali Khan, Oct. 16, 1951; he was replaced on Apr. 17, 1953, by Mohammed Ali Chaudry. Mohammed Ali succeeded him on Aug. 11, 1955. Pakistan was proclaimed a republic March 23, 1956, and Gov. Gen. Iskander Mirza was elected Provisional President. H. S. Suhrawardy, the first non-Moslem League Prime Minister, took office Sept. 12, 1956.

Under the Constitution of Feb. 29, 1956, Pakistan is a republic but continues its membership in the Commonwealth of Nations. The President is elected for five years by members of the central and provincial legislatures. The Prime Minister and his Cabinet are named by the President but are collectively responsible to the National Assembly. The Assembly has 300 members, divided equally between East and West Pakistan and directly elected for five years. On October 7, 1958, President Iskander Mirza proclaimed martial law, suspended the Constitution, dismissed the central and provisional governments, and banned all political parties. But on October 27, 1958, Mirza surrendered his power to General Ayub Khan, who abolished the post of Prime Minister and has been ruling as virtual dictator ever since. He purged corrupt and inefficient office holders, broke up the feudal land system, eliminated much of the black market, tax evasion and hoarding, and revolutionized education. A vote of confidence in February, 1960, extended his rule for five years and gave him power to write a new constitution. He expressed the hope that martial law could end and democracy return in 1961.

Provinces. Pakistan consists of two provinces—West and East Pakistan—approximately 1,000 miles apart, separated by the republic of India. The province of West Pakistan consists of Sind, Baluchistan, the former North-West Frontier Province, western Punjab, the princely state of Bikaner, and a few other small native states. The province of East Pakistan consists of eastern Bengal and the Sylhet district of Assam. Pakistan contains large communities of minorities of Hindus and Sikhs.

ECONOMIC CONDITIONS. Pakistan, rich in industry and natural resources, is mainly an agricultural nation. Upward of 45,000,000 acres are under cultivation; almost half of which are irrigated, largely in Sind and west Punjab in West Pakistan. The Punjab contains important wheat-growing areas, and eastern Pakistan is rich in jute, rice, and tea. In 1952 there were 6,145,000 sheep, 7,067,000 goats, 31,060,000 cattle, 470,000 horses, and (1952) 477,000 camels.

Pakistan is an exporter of agricultural products and an importer of manufactured commodities.

Chief exports in 1958 were jute and raw cotton (17%), tea, wool, and jute manufactures. Leading customers in 1958 were Britain (20%), Japan (10%), the United States (11%), and India (3%); leading suppliers, Britain (18%), Japan (6%), United States and Canada (21%), and other countries (3%). Leading imports were machinery, petroleum and products, and steel and products, vehicles, and cotton piece goods.

Development of a unified nation is retarded by the fact that communication between East and West Pakistan is possible only through a thousand miles of Indian territory or by a long sea voyage.

Since partition, Pakistan has made progress toward industrialization. The most important manufacturing area is in the vicinity of Lahore in the Punjab. Industries include cotton ginning, spinning and weaving, jute manufacturing, sugar refining, cement making, flour mill, railway and engineering workshops, and petroleum refining.

NATURAL FEATURES AND RESOURCES. Almost all of Sind and the west Punjab are a continuation of north-central plateau leading up to rugged mountains in the north and west which traverse Baluchistan and the North-West Frontier Province. Eastern Pakistan is a low-lying, flat country with elevation averaging not more than 600 feet above sea level.

Mineral resources are limited to petroleum, coal, lignite, chromite, and gypsum. Vast quantities of natural gas were discovered at Sul, Baluchistan, in 1952.

SINGAPORE—Status: independent state in Commonwealth of Nations.
Capital: Singapore (pop. 1956: 916,760).
Commissioner General in Southeast Asia: Earl of Selkirk.
High Commissioner for United Kingdom in Singapore: Earl of Selkirk.
Prime Minister: Earl of Selkirk.
Foreign trade: see Federation of Malaya.

History and Government. Singapore, founded in 1819 by Sir Stamford Raffles, comprises the island of Singapore and adjacent islets. It became a separate Crown Colony of Great Britain on Apr. 1, 1946, when the former colony of the Straits Settlements was dissolved. Penang and Malacca were transferred to the Malayan Union, and the small island of Labuan to North Borneo. The Cocos or Keeling Islands were transferred to Australia in 1957 and Christmas Island in 1957.

Under its new 1959 Constitution, Singapore came into effect in May, 1959, for a term of 5 years and by universal suffrage, a legislative assembly of 51 members. Voting is by majority and half of the electorate is elected. But Britain still retains control over Singapore's defense and external affairs and may suspend the Constitution or dissolve the legislative Assembly. Executive power is in the hands of an Internal Security Council consisting of 7 members: the British Commissioner as Chairman, the Prime Minister and two other Ministers, two other British representatives, and one Malayan member.

The basis of Singapore's prosperity is its entrepôt trade. It handles a large part of the export trade of Malaya and also attracts a large volume of trade with India. Singapore has an excellent natural harbor and is the principal British naval base in the Far East. About 76 per cent of the population is Chinese and 12 per cent is Malay.

OCEANIA

Australia, Commonwealth of
 Member of Commonwealth of Nations)
 Area: 2,974,581 square miles.
 Population (est. 1959): 10,061,000 (excluding half-blooded aborigines, estimated at 100,000).
 Density per square mile: 3.4.
 Monarch: Queen Elizabeth II.
 Governor General: Field Marshal Sir William Slim.

Prime Minister: Robert Gordon Menzies.
 Principal cities (est. 1958): Sydney, 2,000,000 (seaport, wool market); Melbourne, 1,726,100 (seaport, wool, wheat); Adelaide, 555,000 (seaport, industrial center); Perth, 548,000 (seaport); Canberra, 39,000 (capital).
 (western seaport); Canberra, 39,000 (capital).

Monetary unit: Australian pound (£A).
Language: English.
Religions (census 1947): Anglican, 39.0%; Roman Catholic, 20.7%; Presbyterian, 9.8%; Methodist, 11.5%; other Christians, 7.1%; others, 11.9%.

STATUS IN THE WORLD TODAY

Situated on a continent located under the overhang of Asia, Australians are a paradox of history. Culturally they are wholly Western, but they exist in what is geographically "the East." They are "in" the Asiatic area and obviously remote from their Western fellows. What goes on in Indonesia, immediately over their heads like an umbrella, is obviously a more intimate worry to them than to the faraway Americans. They are Western and show few signs of any wish to be assimilated to "the East," either politically or culturally. In World War II their sparsely populated continent was one target of the expansionists in overpopulated Japan; hence the current Australian anxiety to sustain their position by rapidly building up the population and economic strength with immigrants from Europe. For what will the United States do if Australian security is actually (not theoretically) menaced by developments in Asia? Will the Americans again come to the rescue?

In formulating a foreign policy, the fundamental problem is how correctly to balance its relations with the United Kingdom on the one hand and the United States on the other. Ordinarily it has not been too difficult to keep these relations in balance. Australia has moved quite close to the United States in the Pacific and Asia without offending Britain and has followed a national line in Asia without tangling with the U.S. It does not recognize Red China. It participates in ANZUS and SEATO (Australia, New Zealand, United States defense pact and Southeast Asia Treaty Organization). It sided with the United Kingdom over Suez. With the right foreign policy, Australians hope to sustain their peculiar position in the critical decades ahead.

Economically, the emphasis since World War II has been on industrial expansion, and today far more people work in factories and offices than on the land. As a trading nation, Australia is closely tied to the United Kingdom and is deeply involved in the Imperial trading system and the Sterling Area. While it has drawn close to the U.S. since World War II, it still normally runs a dollar deficit as an international trader and must get dollar allocations from the sterling area authorities. The marked increase in the flow of American investment capital to Australia has not yet fully corrected the condition.

Politically, Australia has been ruled on the federal level since 1949 by a Liberal-party-Country-party coalition, led by Robert Gordon Menzies as Prime Minister. For eight years before Menzies came to power, the Labor party had ruled. It has been the driving force behind the growth of the welfare state in Australia, and much that it has done while in office is determinative of the climate in which its conservative opposition must function. Although out of power on the federal level, Labor often holds power in the states.

HISTORY AND GOVERNMENT. Australia was the last continent to be discovered. The first Europeans to land were the Dutch, who sailed into the Gulf of Carpentaria in March, 1606. Later in the same year, Luis Vas de Torres, a Spaniard, sailed through the strait subsequently named for him, and may have touched at several points on the north coast. In 1642 Abel Tasman (for whom Tasmania was named) sailed from west to east along the southern shore and proved that Australia was not a part of the Antarctic Continent. The continent was called New Holland until about 1850.

In 1770 Captain James Cook, after visiting New Zealand, sailed to the east coast of New Holland and landed south of the present city of Sydney. His account of the country led to its being claimed and settled by Great Britain.

The first settlement, made in 1788 at Botany Bay, was founded as a penal station for criminals from England. Transportation of criminals was virtually suspended in 1839, and Australia had comparatively few white settlers until gold was discovered in Victoria in 1851, after which immigrants poured in. By 1860 all the states (then separate colonies) except Western Australia had been granted responsible government.

On January 1, 1901, the six Australian states united to form the Commonwealth of Australia. The Federal Parliament consists of a bicameral legislature. The House of Representatives has 124 members elected for 3 years by adult (male and female) suffrage. The Senate has 60 members elected by popular vote for 6 years. One-half of the Senate is elected every 3 years.

Federal judicial power is vested in a Federal Supreme Court of 7 justices, appointed by the Governor General in Council. Each state has its own judicial system.

ECONOMIC CONDITIONS. About 55 per cent of Australia's total area is suitable (mining excepted) only for pastoral pursuits. On March 31, 1958, there were 149,319,000 sheep, 16,916,000 cattle, 1,421,000 hogs, and 695,000 horses.

Sugar and cotton are grown in Queensland and New South Wales, tobacco in northeast Victoria, and vines chiefly in South Australia and Victoria.

New South Wales is the leading industrial state. Power for industry is derived almost entirely from coal.

In 1957 the leading customers were Britain (27%), Japan (14%), France and the United States and Canada (each leading suppliers, Britain (41%), United States and Canada (16%), Germany (4%), and Arabian states (4%). Chief exports were wool (50%), wheat (8%), wheat (6%), and fruit (4%). Leading imports included petroleum and products, motor vehicles, iron and steel, cotton piece goods.

The principal ports are Sydney, Melbourne, and Adelaide.

NATURAL FEATURES AND RESOURCES. Australia is approximately equal in size to the United States* and is more than three-fourths the size of Europe.

Along the east coast, ranges of mountains run from north to south, reaching their highest point in Mt. Kosciuszko (7,352 ft.). The western half of the continent is occupied by a desert plateau which rises to barren, rolling hills near the west coast. Includes the Great Victoria Desert, in the south, and the Great Sandy Desert to the north. The island of Tasmania (26,218 sq. mi.) lies off the southeastern coast.

Australia possesses considerable natural resources. Most important is gold, followed by coal, mined near Sydney, Melbourne, and in eastern Tasmania. Broken Hill mines in New South Wales are one of the most valuable silver-lead areas in the world. Other important minerals in 1955 included tin, copper, iron, and uranium. Petroleum was discovered in Western Australia in 1953.

Forest products include timber (eucalyptus, sawn), eucalyptus oil, sandalwood oil, bark and yacca gum. Sea products include bêche-de-mer, oysters, pearls, pearl shells, tortoise shell, and agar-agar.

DEPENDENCIES. Norfolk Island (19 sq. mi.), under Commonwealth administration since 1914, lies about 800 miles east of South Wales. It enjoys a delightful tropical climate. Citrus fruits, bananas, and coffee are grown.

Nauru (about 8 sq. mi.), an important source of phosphate (exports about 1,000,000 tons annually), was annexed by Germany in 1888 and was placed under joint Australian, New Zealand and British mandate after World War I. In 1947 it was placed under U. N. trusteeship, with the same three administering powers. It lies 2,215 miles northeast of Sydney.

* Not including Hawaii and Alaska.

Ashmore and Cartier Islands (.8 sq. mi.), about 200 mi. off the northeast coast, placed under Australian authority in 1947, while the Heard and McDonald Islands (158 sq. mi.), about 2,500 mi. west of Fremantle, were transferred to Australian control in 1947.

Australian Antarctic Territory (2,000 sq. mi.), comprising all the islands and territories other than Adélie Land, located south of 60° S. lat. and lying between 160° E. long. and 45° E. long., was placed under Australian authority by an act of the Australian Parliament effective in 1936.

Cocos (Keeling) Islands (5 sq. mi.; population 1,000) are a group of 27 small islands in the Indian Ocean about 1,200 mi. southwest of Singapore. Used as a base for the Australia-South Africa air route, they were placed under Australian administration in 1951. Christmas Island (160 sq. mi.; population 2,000), about 850 mi. northeast of Singapore, was transferred to Australian control in 1957. It has important phosphate deposits.

PAKISTAN AND NEW GUINEA, TERRITORY—Status: Australian territory and U.N. trust territory.

Capital: Port Moresby (population 10,000).

Exports: copra, rubber, gold.

Cultural products: coconuts, rubber, cacao.

Minerals: gold, silver, platinum.

On July 1, 1949, the Australian Government of Papua and the U.N. trust territory of New Guinea were joined in an administrative union by act of the Australian Parliament. Provision is made for an executive and a legislative council.

The union comprises the southeastern part of the island of New Guinea, and the island of the D'Entrecasteaux, Louisiade Archipelago, and other nearby groups, was annexed by Queen Victoria in 1883 and by the British Crown in 1901. It came under the control of the Australian Commonwealth in 1901 and became the Territory of Papua in 1906. Japan occupied Papua in early 1942, but in December 1945 Australian control was restored.

The U.N. trust territory of New Guinea, comprising the northern section of eastern New Guinea (93,000 sq. mi.), was mandated in 1920 by the League of Nations to the Government of the Commonwealth of Australia, together with the Bismarck Archipelago (New Britain, New Ireland and other islands), the Admiralty Islands and several outlying groups, and the Solomon Islands (Bougainville and other islands). It was placed under United Nations trusteeship Dec. 13, 1946, with Australia as the administering power. Japanese troops occupied much of the territory in 1942-45. On June 30, 1954, there

were 8,020 Europeans and 3,422 other nonnatives in the territory.

FIJI—Status: Colony.

Governor: Sir Kenneth Maddocks.

Capital: Suva (population 37,371).

Foreign trade (1955): exports, 38% to Britain; imports, 37% from Britain. Chief exports: sugar (49%), coconut oil (18%), gold (8%).

Agricultural products: sugar, coconut oil, copra, bananas, pineapples.

Minerals: gold.

Fiji colony consists of an archipelago of from 200 to 250 islands in the South Pacific Ocean about 1,740 miles northeast of Sydney, Australia. The larger islands, including Viti Levu (4,011 sq. mi.) and Vanua Levu (2,137 sq. mi.) are mountainous and of volcanic origin. The archipelago was ceded to Great Britain by the native ruler in 1874.

The population of the archipelago in Dec., 1955, included 6,402 Europeans, 146,842 Fijians and 166,262 Indians. Importation of the latter to work the sugar plantations has led to important social and economic changes. There has been almost no intermarriage between Fijians and Indians, and considerable ill feeling has developed between them.

During World War II, the archipelago was an important air and naval station on the route from the United States west coast and Hawaii to Australia and New Zealand.

TONGA (FRIENDLY ISLANDS)—Status: Protected state.

Ruler: Queen Salote Tupou.

Chief export: copra (86%).

This native Polynesian kingdom in the Pacific came under British protection through the Anglo-German agreement of November 14, 1899. The native Queen is advised by a British Agent; the 21-member native Legislative Council is partly elected and partly nominated. The only important products are copra and bananas.

PITCAIRN ISLAND—Status: Colony.

Located in the South Pacific, about midway between Australia and South America, Pitcairn has an area of 2 square miles. It was settled in 1790 by British mutineers from the ship *Bounty*, commanded by Capt. Bligh. Overpopulation forced removal of the settlement to Norfolk Island in 1856, but about 40 soon returned. The island is administered by the Governor of Fiji through an elected council headed by a Chief Magistrate. The population is about 150.

New Zealand

(Member of Commonwealth of Nations)

Area: 103,740 square miles (including outlying islands).

Population (estimated 1959): 2,331,000. (1951: European, 93.3%; Maori and half-caste, 5.9%; others, .8%).

Density per square mile: 22.5.

Ruler: Queen Elizabeth II.

Governor General: Viscount Cobham.

Prime Minister: Walter Nash.

Principal cities (census, Apr. 1956): Auckland (greater), 380,412 (seaport and naval base); Christchurch, 193,182 (cereals, stock raising); Wellington, 138,035 (capital); Dunedin City, 99,326 (textiles).

Monetary unit: New Zealand pound (£NZ).

Language: English.

Religions (census 1956): Church of England, 35.9%; Presbyterian, 22.3%; Roman Catholic, 14.3%; Methodist, 7.4%; Baptist, 1.6%; others, 18.5%.

STATUS IN THE WORLD TODAY

New Zealand has not felt it wise or necessary to go as far as neighboring Australia in developing its own foreign policy and a machinery of diplomacy to implement it. It has, however, joined the ANZUS (Australia, New Zealand, United States) defense pact and SEATO (South-east Asia Treaty Organization) and participated in the Colombo Plan, indications of a realization of its relationship to Asia on a regional basis. It has normally been satisfied to rest in the shadow of the United Kingdom where foreign affairs are concerned, but has now moved somewhat closer to Australia. Economically, it is closely linked to the United Kingdom, which takes about two-thirds of all its exports and furnishes about half its imports. During the Suez crisis of 1956, it stood with Britain, although its position might have been different had there been a Labor instead of a Nationalist administration.

HISTORY AND GOVERNMENT. New Zealand, about 1,250 miles east of Australia, consists of two main islands and a number of smaller outlying islands so scattered that they range from the tropical to the antarctic. The islands, which have approximately the area of Italy, were discovered and named New Zealand in 1642 by Abel Tasman, a Dutch navigator. Captain James Cook explored them in 1769. On Jan. 22, 1840, Britain formally annexed them.

New Zealand was granted self-government in 1852, a full parliamentary system and ministries in 1856 and dominion status on Sept. 26, 1907. Meanwhile, from 1861 to 1871 there was fierce intermittent fighting with the native Maoris. The Queen is represented by a Governor General, and the Cabinet is responsible to a unicameral Parliament of 76 white and 4 Maori members elected by popular vote for 3 years.

ECONOMIC CONDITIONS. Primarily a grazing country, New Zealand is one of the world's largest exporters of mutton, wool, butter, and cheese. In 1957, livestock included 42,500,000 sheep, 5,924,000 cattle, and 689,000 hogs. Outside of grass, the chief crop is wheat. Other crops are barley, potatoes, onions, tobacco, and vegetables.

Leading customers in 1957 were Britain (59%), the United States and Canada (9%), France (6%), and West Germany (5%); leading suppliers, Britain (15%), Australia (17%), the United States (10%), Canada (10%), and West Germany (3%). Leading exports were wool (33%), lamb and mutton (16%), and butter (14%).

NATURAL FEATURES AND RESOURCES. New Zealand's two main components, North Island and South Island, separated by Cook Strait, which varies from 22 to 190 miles in width. North Island (303,730 sq. mi.) is 515 miles long and wide in its south-central part. It contains many hot springs and beautiful geysers.

South Island (58,093 sq. mi.) has the Southern Alps along its west coast. Mt. Cook (12,349 feet) the highest peak in New Zealand.

Principal minerals are coal and copper. Other minerals of importance include tungsten, pumice, silica sand, asbestos, scheelite, iron ore, and phosphate. About 30 per cent of the total area is forested.

Numerous rushing streams give New Zealand a great volume of hydroelectric power. About 95 per cent of the population has access to power.

DEPENDENCIES. The Auckland Islands (234 sq. mi.) and Campbell Island (4 sq. mi.) are the principal outlying islands, which have a total area of 324 square miles. They are included within the geographical boundaries of New Zealand, as proclaimed in 1847. The Auckland Islands and Campbell Island are uninhabited. Six hundred miles north of the Auckland Islands are the volcanic Kermadec Islands (13 sq. mi.), annexed in 1887. The Union (or Tokelau) Islands (4 sq. mi.) transferred in 1925 from the Gilbert and Ellice Islands colony, were declared a dependency of New Zealand effective Jan. 1, 1949.

In Polynesia a number of uninhabited islands were brought under New Zealand control in 1901. Rarotonga and Manihiri in the Cook group total 84 square miles. Niue (or Savage Island) (115 sq. mi.) the largest island outside the Cook group. New Zealand also administers the Western Samoa Dependency (175,000 sq. mi.), an antipodean region claimed by Great Britain in 1919.

WESTERN SAMOA—Status: New Zealand Territory.

Capital: Apia (population 16,000).

Chief exports: cacao, copra, bananas.

Principal products: copra, cacao, banana, tropical fruits.

The former German Samoan Islands were occupied by New Zealand troops in the closing weeks of World War I and were ceded to New Zealand by the League of Nations in 1920 as the Territory of Western Samoa. They came under U.N. trusteeship in 1947, with New Zealand acting as the administering authority. In January, 1960, sovereignty over Western Samoa reverted completely to New Zealand. The High Commissioner is assisted by an Executive Council, a Legislative Assembly, and has a Samoan majority and a Native Council. There are nine islands, of which the largest and most populous are Savaii (703 sq. mi.) and Upolu (430 sq. mi.). They are largely volcanic but fertile. The inhabitants are predominantly Polynesian Christians.

PACIFIC ISLANDS (British)

High Commissioner in Western Pacific: Sir Gordon Gutch.

The British groups in the Pacific administered by the British High Commissioner in the Western Pacific include (1) Gilbert and Ellice Islands, (2) British Solomon Islands, (3) New Hebrides Condominium (see French Overseas Territories). The High Commissioner has headquarters at Honiara, in the Solomon Islands.

GILBERT AND ELLICE ISLANDS—British Colony.

The islands in these groups (including the Gilbert group; the Ellice group; Ocean Island [the seat of administration], Fanning, Washington and Christmas Islands; and the Phoenix group) were proclaimed a British protectorate in 1892 and annexed as a colony in 1915. The most important product is high-grade phosphate.

Ownership of Canton and Enderbury Islands in the Phoenix group was long in dispute between Great Britain and the United States until 1939, when an agreement for "use in common" was reached by the two governments. Several of the Gilbert Islands were occupied by Japanese forces in World War II, and Tarawa was the scene of one of the fiercest battles in U.S. Marine Corps history in Nov. 1943.

SOLOMON ISLANDS—Status: Protectorate.

This British protectorate, lying east of New Guinea, includes the islands of Guadalcanal, Malaita, San Cristobal, New Georgia, Santa Isabel, Choiseul and numerous smaller islands. Bougainville, one of the group, is under Australian mandate. The islands, which came under British protection late in the 19th century, were the scene of several important U.S. naval and military victories during World War II. There are no native states, and administration is carried on by the High Commissioner, assisted by a nominated Advisory Council. The most important products are copra and kauri wood. The population is predominantly Melanesian.

BULGARIA (People's Republic)

Народна Република България

42,796 square miles.

Population (census 1959): 7,793,000 (Bulgarian, 91%; Turkish, 6%; Greek, 2%; others, 1%).

Density per square mile: 182.1.

President: Zheko Uzunov. Prime Minister: Anton Yugov.

Principal cities (census 1956): Sofia, 725,000 (capital, railroad center); Plovdiv, 250,000 (commercial center); Varna, 119,000 (Black Sea port); Ruse, 83,472 (chief inland port); Burgas, 72,795 (Black Sea port).

Currency unit: Lev.

Official languages: Bulgarian, Turkish.

Religion: Greek Orthodox, 84.4%; Muslim, 13.5%; Jewish, .8%; Roman Catholic, .8%; others, .5%.

BULGARIA IN THE WORLD TODAY

Bulgaria, probably because its religion, language, and national origin are the same as those of Russia, has become what might be called a model satellite. Despite the

tyrannical rule of the Communist party, the people do not seem to have the hatred for their rulers which the Hungarians demonstrated in their revolt. Predominantly agricultural, Bulgaria has more than two-thirds of its arable land held by collective farms, the highest percentage among Russia's East European satellites. Unlike Yugoslavia or Poland, it has followed the Kremlin line without balking outwardly, operating under a personal dictatorship of the Stalin type as long as Stalin lived, then changing leadership and splitting the posts of party secretary and prime minister between two individuals when Stalin and the "cult of personality" were denounced. Although it once discussed the possibility of federation with Yugoslavia, it has, since 1948, loyally denounced Titoism whenever called upon to do so. One explanation is that even in Czarist days, Russia was considered a friendly, Slavic power rather than an inimical, exploiting imperialist state. Although its rulers showed marked pro-German feelings in both World Wars, the people regarded Russia with friendship. For in the nineteenth century, Russia was

one of the champions of Bulgarian independence.

The relations between Bulgaria's Communist regime and the United States reached an all-time low in 1950, when Sofia accused the American Minister, Donald Heath, and other members of his staff of espionage. The United States responded by breaking off diplomatic relations and withdrawing its representatives. After three vain attempts to restore official relations, the Bulgarians finally apologized early in 1959 for having made the unfounded accusations against the American diplomats, and on that basis diplomatic relations were resumed.

HISTORY AND GOVERNMENT. The first Bulgarians, a tribe of wild horsemen akin to the Huns, crossed the Danube from the north in A.D. 679 and subjugated the Slavonic population of Moesia. They adopted a Slav dialect and Slavic customs and twice conquered most of the Balkan peninsula between 893 and 1280. After the Serbs subjected their kingdom in 1330, the Bulgars gradually fell prey to the Turks, and from 1396 to 1878 Bulgaria was a Turkish province. In 1878, Russia forced Turkey to give the country its independence; but the European powers, fearing that Bulgaria might become a Russian dependency, intervened. By the Treaty of Berlin (July, 1878), Bulgaria became autonomous under Turkish sovereignty.

In 1887, Prince Ferdinand of Saxe-Coburg-Gotha was elected ruler; on Oct. 5, 1908, he declared Bulgaria an independent kingdom.

Bulgaria joined Germany in World War I and lost. On Oct. 3, 1918, Tsar Ferdinand abdicated in favor of his son, who became Tsar Boris III. The Treaty of Neuilly the next year disarmed Bulgaria, reduced it to its 1878 size, and levied a heavy indemnity.

Boris assumed dictatorial powers in 1934-35. When Hitler awarded Bulgaria Southern Dobruja, taken from Rumania in 1940, the weak but land-hungry Boris joined the Nazis in war the next year and occupied parts of Yugoslavia and Greece. Later, with the fortunes of war swinging inexorably against them, the Germans tried to force Boris to send his troops against the Russians. Boris resisted and died under mysterious circumstances on Aug. 28, 1943.

Simeon II, infant son of Boris, became nominal ruler under a regency. Three days after Russia declared war on Bulgaria on Sept. 5, 1944, Bulgaria declared war on Germany. Russian troops streamed in the next day, and under an informal armistice a coalition "Fatherland Front" cabinet was set up under Kimon Georgiev.

Most of the population is Greek Orthodox. Clergy of all faiths are paid by state. The national language, Bulgarian, is closely related to Russian; both employ the Cyrillic alphabet.

ECONOMIC CONDITIONS. Bulgaria is predominantly agrarian, with most of the population engaged in agriculture. Because of the mountainous character of the country, however, less than half of the land is tilled or used for pasture. Collectivization is well advanced. More than half the cultivated area is devoted to cereals, including wheat, corn, barley, oats, and rye. Other crops are tobacco, alfalfa, cotton, flax, potatoes, and sugar. There are extensive vineyards in the southern valleys.

Industries are of minor importance, with few exceptions—tobacco leaf processing and liquors, fertilizers, and flour—are confined to domestic markets. Industrialization is one of the chief aims of the Communist regime, however, and all industries of any importance have been nationalized. Both the first (1948-53) and the second (1953-57) five-year plans emphasized development of heavy industry. An oil refinery with an annual capacity of 1,000,000 tons is currently under construction.

Foreign trade necessarily consists of exchange of agricultural products for cheap manufactures.

Leading customers in 1950 were Germany, the U.S.S.R., and Czechoslovakia; Hungary, Rumania, and Poland. Leading suppliers were the U.S.S.R. and the above-named satellites. Tobacco is the principal export.

NATURAL FEATURES AND RESOURCES. Two mountain ranges and two valleys mark Bulgaria's topography. The Balkan belt crosses the center of the country, almost due east-west, rising to a height of 7,800 feet. The Rhodope range breaks off from the Balkans in the west, curves and then straightens out to run nearly parallel along the southern border. Between the two ranges is the valley of the Maritsa, Bulgaria's principal river. Between the Balkan range and the Danube, which forms most of the northern boundary with Rumania, is the Danubian plain, traversed by several short rivers. Southern Dobruja, a fertile region of 10,000 square miles below the Danube delta, is an area of low hills, fens and sandy steppes.

Soft coal is Bulgaria's principal mineral. Other minerals include chromite, gypsum, iron ore, manganese ore, rock salt, and silver.

Burma (Republic)

Area: 261,757 square miles.

Population (est. 1959): 20,457,000

ns, 60%; Shans, 7%; Chins, 2%;
s, 1%; Indians, 6%; Chinese, 1%;
urmans, 1%; others, 22%).
ity per square mile: 78.2.
dent: U Win Maung.
ier: U Nu.
lpal cities (census 1953): Rangoon,
(capital, chief port); Mandalay,
(river port, upper Burma); Moul-
02,777 (seaport).
etary unit: Kyat.
uages: Burmese (70%), English.
ions: Buddhist, 90%; Mohammed-
%; Hindu, 3%; Christian, 2%;
2%.

STATUS IN THE WORLD TODAY

Burma, which achieved its independence on Jan. 4, 1948, has tried to follow a policy of neutralism, or "third-force," to avoid involvement in the cold war. Despite the threat posed by its giant neighbor, Communist China, it has taken such pro-Western steps as supporting the U.N. on the Korean issue and opposing the Soviet bloc on the Sino-Burmese border issue.

Despite its neutralism, Burma's relations with Communist nations have not been happy. As the world's largest rice-exporting nation, Burma found it difficult to dispose of its surpluses in 1954 and turned to the Sino-Soviet bloc for a far-reaching barter agreement which would dispose of 25 per cent of its rice stocks. Then, in trying to dispose of the rest of its rice for cash elsewhere, it found itself competing with its own exports, which the Communists had flooded on the market at a low price. Locally, it was faced with an armed Communist rebellion only two months after achieving independence. And its relations with China were complicated by the presence of Chinese Nationalist troops in border areas, which gave the Communists a pretext to occupy frontier sections of Burma. A partial settlement of the border disputes was reached in a border agreement signed in February, 1960. Both sides yielded some land, but the agreement did not settle all outstanding questions.

Burma's relations with the United States improved when it received about \$20 million in grant aid between 1950 and 1953, but then terminated all grant-aid agreements because of the appointment with the United States of the removal of the Chinese Nationalist troops in the north. But after several years of economic dealings with the Communist bloc, Burma resumed in 1957 negotiations for loans and the purchase of agricultural products along with a \$20 million loan from the International Bank for Reconstruction and Development.

Initially, Burma was ruled for the first

ten years of its independence by the Anti-Fascist People's Freedom League (AFPFL), a coalition originally organized as a wartime resistance movement. After expelling the Communist elements, the AFPFL government gained steadily in strength and demonstrated its ability to bring about meaningful economic progress. But gradually differences developed among the AFPFL leaders, and when the leadership split publicly, the Burmese Army took power in September, 1958, in a bloodless coup to prevent Communist elements from seizing control. Army officers said that as soon as they had put an end to the Communist insurrection and wiped out the bands of guerrillas, elections would be held and the administration turned over to civilians. This was done in April, 1960. Among the accomplishments of the Army regime was the virtual suppression of insurgent groups, a cut in living costs, virtual elimination of corruption and improvement of morale in permanent government service.

HISTORY AND GOVERNMENT. Lying on the eastern side of the Bay of Bengal between India, China, and Thailand, the Union of Burma came into existence as an independent state on Jan. 4, 1948. In 1612 the British East India Company sent agents to Burma, and in the seventeenth and eighteenth centuries the Burmese stoutly resisted the efforts of British, Dutch, and Portuguese traders to establish posts on the Bay of Bengal. Actual British rule dated from 1826, and in 1886 British troops forced the annexation of all Burma to India. On April 1, 1937, the British separated Burma from India and set it up as a Crown colony with its own legislature and a British Governor.

For hundreds of years a battlefield of petty princes, Burma became a key battleground in World War II largely because the 800-mile Burma Road was the Allies' vital supply line to China. The Japanese invaded the country in Dec., 1941, and by May 1942, had occupied most of it, cutting the road. In Aug., 1942, the Japanese set up a puppet government.

After one of the most difficult campaigns of the war, Allied forces liberated most of Burma prior to the Japanese surrender on Aug. 14, 1945.

The Constitution of Sept. 24, 1947, provides for a government headed by the President, who is elected by the two houses of Parliament—the Chamber of Deputies, consisting of 250 members elected for 4 years, and the Chamber of Nationalities, consisting of 125 members elected for 4 years. The President appoints the Premier on nomination of the Chamber of Deputies. Four frontier areas—the Shan, Kachin, and

Karen states, and the Chin special division—are constituent parts of the Union but enjoy some autonomy. The Constitution contemplates a form of state socialism, with the operation of all public utilities and the exploitation of all natural resources to come eventually under state control.

SOCIAL AND ECONOMIC CONDITIONS.

The natives in general are Mongolian; the Burmese are the most advanced. Indians, settled in the Irrawaddy delta region, supply most of the coolie labor, while the Chinese constitute the artisan and merchant class. Buddhism, the national religion, profoundly affects the national character; every village in the country has its temple.

Burma is essentially agricultural, with crop growing concentrated in the delta and river valleys. It is a leading producer of rice, the staple food, which occupies two-thirds of the cultivated area. Crops grown in the dry zone in upper Burma include millet, cotton, peanuts, and sesame. Other crops include tobacco, fruit, vegetables, and cereals. The number of rubber plantations has increased. The principal domestic animals are water buffalo, used as a beast of burden in the delta, and small humped oxen, which predominate in other areas. In July, 1959, Burma accepted \$30 million from the U.S. to be received over a period of four years, and to cover the foreign-exchange costs of the construction of a highway connecting Rangoon with central Burma, and for physical construction at the University of Rangoon.

Leading industries include silk weaving and dyeing, rice husking, oil refining, and wood carving.

Chief exports in 1958 were rice and products (72%) and teak and cotton. Leading customers were India (22%), Japan (5%), Ceylon (12%), and Britain (7%); leading suppliers were Britain (18%), Japan (24%), and India (10%).

NATURAL FEATURES AND RESOURCES.

Slightly smaller than Texas, Burma is divided into three natural regions: the Arakan Yoma, a long, narrow mountain range forming the barrier between Burma and India; the Shan Plateau in the east, extending southward into Tenasserim; and the Central Basin, running down to the flat, fertile delta of the Irrawaddy in the south. This delta contains a network of intercommunicating canals and nine principal mouths.

Mineral resources are considerable but, in many cases, undeveloped.

Other minerals include lead, silver, zinc, nickel, cobalt, copper, gold, iron ore, molybdenum, coal, uranium (reported), rubies, sapphires, and jade.

More than half of Burma is forested. Teak, valuable for naval construction, is the main timber product. Its cutting is strictly controlled.

Cambodia (Kingdom)

Area: 67,568 square miles.

Population (est. 1958): 4,740,000.

Density per square mile: 70.2.

Regent: Prince Sisowath Monireth.

Premier: Pho Proeung.

Principal cities (est. 1958): Pnom-Pen 400,000 (capital); (1941) Battambang, 567 (rice).

Monetary unit: Riel.

Languages: Cambodian, French, and Khmer.

Religion: Buddhism.

STATUS IN THE WORLD TODAY

Cambodia, which was relatively free of Communist subversive activity during prolonged conflict between France and Communist-led Viet Minh, has pursued a neutralist course in world politics, to steer a middle course between the two world power blocs. The only part of former French Indo-China not partitioned by the Geneva agreements (July, 1954) was Cambodia. It remained for the most part outside the main theaters of military operations. While heavily dependent on aid from the United States (about \$40 million annually) and to a lesser extent France, Cambodia has also received large-scale aid from the Communist bloc, especially China. Allegations of American interference in Cambodia's internal affairs have been more than offset by the exposure of Communist subversive activities financed and directed from abroad. Despite this, Cambodia recognized Red China in 1958, and its prime minister then made a highly publicized visit to Peking.

The nation's long-range economic development plans are proceeding slowly. Although most American aid has gone to support Cambodia's armed forces, the United States has also contributed to civil projects. The most spectacular is a highway connecting Pnom-Penh, the capital, with Kompong Som, on the Gulf of Thailand, where the French are building a deep water port to free Cambodian commerce from dependence on the Mekong river.

Political life in Cambodia has been dominated by the volatile, enigmatic personality of ex-King Norodom Sihanouk, who ascended the throne in 1941. Four years later he abdicated to play a more advisory role in politics. He organized the Popular Socialist Community, which has controlled the government ever since 1955. But Norodom Sihanouk has consented to

Intermittently as Prime Minister, al life has been characterized by d cabinet instability.

RY AND GOVERNMENT. Cambodia nded on the south and east by south m, on the north by Laos and Thai- on the west by Thailand, and on the west by the Gulf of Siam. Its re- history dates back to the beginning Christian era, when it was known as an. It was absorbed in about A.D. 600 Khmers, under whose rule magnifi- empires were built at Angkor. The of the French, who were granted a orate in 1863, prevented the anni- on of the Khmer empire by the mese and Siamese. It was occupied an during World War II. Cambodia's ure consists of a unicameral Na- Assembly of 61 members elected for by direct universal suffrage.

OMIC CONDITIONS. About 76 per of the population is Cambodian, five at Anamese, and four per cent Chi- the forested regions of the northeast ibited by various primitive peoples. culture is the basis of the economy. chief crop is rice, grown principally Battambang area. Second in im- ce is rubber. Other crops include o, kapok, cotton, pepper, and maize. breeding is of major importance. Industries include silk and cotton g, rice milling, and the salting of ained from Lake Tonle Sap during -water season.

ng exports include rice, rubber, products, wool and hides, and A large part of the trade is with the United States and Vietnam.

AL FEATURES AND RESOURCES. la consists chiefly of a large plain ringed in by mountains the east by the Mékong river. The centered on Lake Tonle Sap, which rural storage basin of the Mékong. ts cover about 75 per cent of the t most are unexploited. Deposits of , limestone and phosphate exist but undeveloped.

Cameroun (Republic)

166,800 square miles.
ation (est. 1959): 3,200,000 (16,500 ns).
ty per square mile: 19.1.
ent: Ahmadou Ahidjo.
er: Charles Assale.
pal cities: Douala, 119,000 (chief faoude, 55,000 (capital).
ary unit: Franc C.F.A. (Comm- rançaise de l'Atlantique).
ages: French, Foulbé, Bamiléké y other dialects.

Religions: Animist, Christian, Moslem.

* One franc C.F.A. = 0.02 new French franc.

HISTORY AND PRESENT STATUS

The Cameroun became independent on January 1, 1960, after 75 years of German and French rule. The Cameroon estuary and coast were discovered toward the end of the 15th century by the Portuguese navigator Fernando Po. Not until the end of the 17th century were the first European trading posts established. In 1884 the area became a German colony (Kamerun). After World War I the region was divided as a League of Nations mandate between Britain and France, four-fifths of it going to France. The mandate subsequently became a United Nations trusteeship, and in 1957 a self-government statute was enacted preliminary to independence. The present government is patterned after the presidential regime of France, with a premier, cabinet and 100-man parliament. The president is elected for a five-year term.

ECONOMIC CONDITIONS. The principal exports are cacao, coffee, bananas, timber and cotton. Exports (1958) came to 22,-290,000,000 fr. C.F.A., imports to 21,452,-000,000 fr. C.F.A. Mineral resources include titanium, tin and gold. The biggest industrial plant is at Edea, producing 45,000 tons of aluminum a year.

Chile (Republic)

(República de Chile)

Area: 286,396 square miles.
Population (est. 1959): 7,465,000.

Density per square mile: 26.1.

President: Jorge Alessandri.

Principal cities (census 1954): Santiago, 1,546,884 (capital); Valparaíso, 247,212 (port); Concepción, 134,549 (farming center); Viña del Mar, 85,281 (resort center); Antofagasta, 62,272 (nitrates).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Like many other countries which have to depend on one or two products to earn foreign exchange, Chile's principal problem is economic. Nitrates and copper exports bring in nearly all its vitally needed earnings, and these vary as the world prices of the two minerals fluctuate. In addition, although Chile once exported wheat and other agricultural products, in the past twenty years it has become an increasingly large importer of these commodities and has consequently needed more foreign exchange. Industrialization, begun in World War I and stimulated by the depression, has helped to provide locally many manufactured goods formerly

supported. To reduce its dependence on imported petroleum products, the government has started drilling for oil wells in southernmost Tierra del Fuego. It has also established a major steel industry in Talcahuano. But swiftly rising prices have brought about an inflation which has caused riots and strikes over such comparatively small increases in living costs as a rise in bus fares in Santiago.

HISTORY. Europeans first arrived in 1536, when Diego de Almagro, an associate of Pizarro, led an unsuccessful invasion from Peru. Five years later another Spaniard, Pedro de Valdivia, founded Santiago. On Sept. 18, 1810, Chile rebelled against Spanish rule, but independence was not won completely until 1818, when Bernardo O'Higgins and José de San Martín finally crushed the Spanish armies.

Chile, which has never lost a war, fought with Bolivia and Peru in 1879-83 and won the province of Antofagasta, Bolivia's only outlet to the Pacific, as well as extensive areas from Peru. In World War I, Chile was neutral.

During the decade after the war the demand for social and political reform resulted in the enactment of reform bills, and a strong executive replaced the rather ineffective parliamentary system. A series of brief governments came about as a result of the 1929 depression, but stable regimes returned in 1932.

GOVERNMENT. The nation elects a President every six years, a Senate of 45 members every eight years (one-half renewable every four years), and a Chamber of Deputies of 147 members every four years. The President is assisted by a Cabinet responsible to him but subject to impeachment by Congress, which also may override a presidential veto by two-thirds vote. All literate citizens over 21 may vote.

ECONOMIC CONDITIONS. Chilean agriculture is mostly confined to the temperate central valley, similar to that of California. Productive land is extremely limited, and most of it must be irrigated. Wheat (1958-1959: 1,007,000 metric tons) is the leading crop. Grapes, next to wheat in acreage, produced an estimated 118,800,000 gallons of wine in 1956. Feudal-type estates, averaging 2,500 acres, predominate. Cattle in 1958 totaled 2,590,000 and sheep 6,540,000. Wool production (1958) was about 50,700,000 pounds, greasy basis.

Trade. In 1957 the leading customers were the U.S. (41%), Britain (14%), West Germany (13%), and Argentina (6%); leading suppliers, the U.S. (51%), West Germany (11%), Argentina (4%). Chief exports were copper (59%), nitrate of soda (10%), and iron ore (6%). Lead-

ing imports were machinery (26%), transportation equipment (8%), and petroleum (7%).

Except for mineral processing, manufacturing is of low-priced consumer goods, particularly textiles.

NATURAL FEATURES AND RESOURCES. A narrow, mountainous land, Chile is one-third of its area covered by the rising ranges of the Andes. In the north the mineral-rich Atacama Desert, between the coast mountains and the Andes, the center is a 700-mile-long, sparsely populated, between the Andes and the coastal plateau. In the south, the Andes border on the ocean.

At the southern tip of Chile's main land is Punta Arenas, the southernmost city in the world, and beyond that lies the Strait of Magellan and Tierra del Fuego, an island divided between Chile and Argentina. The Juan Fernández Islands, in the South Pacific about 400 miles west of the mainland, and Easter Island, about 2,000 miles west, are Chilean possessions.

The basis of the country's economy is its mineral resources in the northern desert provinces of Atacama, Antofagasta, and Tarapacá, where the only natural nitrate in the world is found. Some 60 per cent of the world's iodine is obtained as a by-product of nitrate processing. Chile's monopoly in nitrate, however, declines in importance with development of the synthetic product.

The world's largest copper reserve, estimated at 134 billion pounds, is in Chile, and also more than 900 million tons of high-grade iron ore. The reserve of Chilean coal, noted for quantity rather than quality, exceeds two billion tons.

China (Republic)

(Chung-Hua Min-Kuo)

Area: 3,911,209 square miles.*

Population (census 1958): 679,232,000

Density per square mile: 173.7.

President, Nationalist China: Generalissimo Chiang Kai-shek.

Premier: Chen Cheng.

Chairman, Communist China: Lin Biao.

Premier: Chou En-lai.

Principal cities (census 1953): Shanghai, 6,204,417 (chief port, industrial and financial center); Peking (Peking), 2,750,000 (capital, Communist China); Tientsin, 2,693,831 (commercial center); (established 1949) Chungking, 2,000,000 (river port, industrial center); Mukden, 1,790,000 (Manchurian center).

* Including Province of Formosa (Taiwan), Manchuria, and Tibet. Census not taken in Formosa (population estimated at 7,591,298); population total excluding Formosa estimated 11,743,320 Chinese resident abroad. The population figure is regarded with considerable accuracy.

nal center); Canton, 1,210,000 (a major commercial center); Wuhan, 1,000,000 (a river port); Nanking, 1,020,000 (a Nationalist capital).
 Monetary unit: Chinese dollar (yuan).
 Language: Chinese.
 Religions: Principally Confucian, Buddhist and Taoist.

STATUS IN THE WORLD TODAY

Communist China, as the Asian partner of the U.S.S.R., carries out in Asia the policy which the Russians are particularly active in pushing in Africa and the Middle East—supporting nationalistic movements, opposing any American or Western as “imperialistic” and “colonial,” and offering economic assistance, although to an extremely limited degree, to newly established governments, and undermining, wherever possible, democratic institutions and administrations. Its most notable example of intervention was in the Korean War. But it is equally active in the Far East, which came into being in South China and continuously dangles the prospect of increased trade before Japan in order to gain diplomatic recognition. While China has been recognized by a fairly large number of countries, including the United States, it has yet to attain membership in the United Nations, despite repeated efforts by the U.S.S.R., or to oust Nationalist China from its seat on the Security Council.

China's model for the Communist state is found in Stalin's totalitarian institutions. Although Communist party leader Mao Zedong, in a 1957 speech entitled “Let the Hundred Flowers Bloom, Let a Hundred Schools of Thought Contend,” seemed to indicate that there would be some criticism of the administration, those who took him at his word and expressed themselves being “re-educated” in labor camps or other institutions, and the lack of critical thought was quickly suppressed. While there is no accurate way to gauge the true feeling of the Chinese toward the Communist regime, reports from the mainland indicate there has been increased resistance from a number of provinces, with the government determined to suppress all opposition ruthlessly.

There has been particular widespread discontent among the peasants, the backbone of agriculture having been suffering in recent years. The Communists are trying to modernize China by adopting the Soviet model of emphasis on heavy industry. The chief stress has been on capital-goods production which was the first Five-Year Plan, begun in 1953, to raise 18.8 per cent to 9.7 per cent for consumer goods. Industrial gains have been made. But since the state has extracted the “surplus” extracted from

the countryside to develop industry, there has been little capital available to invest in agriculture. The Communists have tried to increase production, but the result has not been impressive. Figures on recent crops show that collectivization of the land has not solved China's problem of increasing agricultural production and that greater attention is going to have to be given by the leaders to China's rural problems. State grain collection already has been slightly eased as the result of peasant withholding of grain, and travel restrictions have been tightened because of the exodus to the city.

The seriousness which Communist leaders attach to the food problem is underlined by the fact that in order to provide more farm labor, they have even broken up the traditional basic Chinese social unit—the family. Fathers and mothers are taken from their homes and housed in separate barracks to constitute male and female working gangs, while their children are placed in state-operated nurseries. At intervals, such as every two weeks, the families are permitted a brief reunion.

While the strains imposed on China's rural millions have been severe, it must be recognized that the over-all national income of Red China appears to have gone up each year by about 9 per cent. This has meant a per capita annual rise in income of 6-7 per cent. When compared with the economic gains of postwar Japan, China's achievements are not so impressive; but, when compared with the years of relative stagnation in China's past, they are impressive indeed.

HISTORY AND GOVERNMENT.

By 2000 B.C., the Chinese were living in the Hwang Ho basin, and they had achieved an advanced stage of civilization by 1200 B.C. The great philosophers, Lao-tse, Confucius, Mo Ti, and Mencius lived during the Chou dynasty (about 1122 to 249 B.C.). The warring feudal states were first united under Emperor Ch'in Shih Huang Ti, during whose reign (246-210 B.C.) work was begun on the Great Wall. Under the Han dynasty (206 B.C. to A.D. 220) China prospered and traded with the West.

The T'ang dynasty (618-907) has often been called the golden age of Chinese history. Painting, sculpture, and poetry flourished under royal patronage, and printing made its earliest known appearance.

The Mings, last of the native rulers (1368-1644), overthrew the Mongol, or Yuan, dynasty (1280-1368) established by Kublai Khan, whose dominions extended into eastern Europe. The weakening Mings in turn were overthrown in 1644 by invaders from the north, the Manchus.

The Chinese closely restricted foreign activities, and by the end of the 18th century only Canton (and the Portuguese port of Macao) were open to European merchants. Following the Anglo-Chinese War of 1839-42, however, several treaty ports were opened and Hong Kong was ceded to Britain. Treaties signed after further hostilities (1856-60) weakened Chinese sovereignty and removed foreigners from Chinese jurisdiction. The disastrous Chinese-Japanese War of 1894-95 was followed by a scramble for Chinese leases and concessions by European powers, which resulted in the Boxer Rebellion (1900), suppressed by an international force.

The death of the Empress Dowager Tzu Hsi in 1908 and the accession of the infant Emperor Hsüan T'ung (Pu-Yi) were followed by a nation-wide rebellion led by Dr. Sun Yat-sen, who became first President of the Provisional Chinese Republic in 1911. The Manchus abdicated on Feb. 12, 1912. Dr. Sun resigned in favor of Yuan Shih-k'ai, who suppressed the republicans but was forced by a serious rising in 1915-16 to abandon his intention of declaring himself Emperor. Yuan's death in June, 1916, was followed by years of civil war between rival militarists and Dr. Sun's republicans. The death in 1925 of Dr. Sun, who had controlled only the Canton area in opposition to the recognized regime, was followed by a revival of the Kuomintang party, which practically deified him. Nationalist forces, led by Gen. Chiang Kai-shek and advised originally by Communist experts, soon occupied most of China, setting up a Kuomintang regime in 1928. Internal strife continued, however, and Chiang broke with the Communists.

An alleged explosion on the South Manchurian Railway on Sept. 18, 1931, brought invasion of Manchuria by Japanese forces, who installed the last Manchu Emperor, Henry Pu-Yi, as nominal ruler of the puppet state of "Manchukuo." Japanese efforts to take China's northern provinces in July, 1937, were resisted by Chiang Kai-shek, who meanwhile had succeeded in uniting most of China behind him. Within two years, however, Japan seized most of the ports and railways. The Kuomintang government retreated first to Hankow and then to Chungking, while the Japanese set up a puppet government at Nanking headed by Wang Ching-wei.

When the Japanese surrendered in 1945, China signed a treaty with the Soviet Union providing for Soviet withdrawal from Manchuria, joint Chinese-Soviet control of Manchurian railways for 30 years, a joint Chinese-Soviet naval base at Port Arthur, and a free port at Dairen.

The surrender of Japan also touched off a civil war between Nationalist and Communist forces for control of China. By the

end of 1949, all of the republic of the island of Formosa was under Communist control. Barricaded on Formosa, the Nationalist regime had little means of its disposal to make any effective counter attack upon the mainland. The Communists, however, after the outbreak of the Korean war in 1950, promised naval and air aid to repel any invasion of Formosa.

The Communists meanwhile set up a government on Sept. 1, 1949, a soviet-type government. After prolonged negotiations, the People's Republic of China and the Soviet Union signed a 30-year treaty of friendship and mutual assistance on Feb. 14, 1950; its publication provided for return of the Changchun Railway to China and the eventual return of Port Arthur and Dairen.

The Communist regime subsequently was recognized as the legal government of China by many nations but was unable to secure a place in the U.N. It threw several hundred thousand men into the Korean war of 1950-53 in a futile effort to drive U.N. forces from Korea.

ECONOMIC CONDITIONS.

Agriculture. In China, nearly 80 per cent of the population depends on the land for livelihood. Subsistence crops are not so highly emphasized, but China is still not self-sufficient in food. Cultivation is intensive, holdings are small, and irrigation widely practiced. The three most important food crops are rice, wheat, and corn.

In northern China, wheat, barley, sorghum, millet and other cereals, beans and peas predominate, whereas in the south, rice, sugar, and indigo are important. The Yangtze basin, one of the most favored agricultural regions in the world, is China's premier granary. Tea, the chief beverage, is grown mainly in the central uplands, coastal ranges and Szechwan.

Silkworm culture is practiced widely, especially in the lower Yangtze valley. Beans and cotton are of ever-increasing importance. Other crops include fibers, tobacco, vegetable oils, cane sugar, and medicinal plants and spices.

The urgent need for subsistence crops has confined grazing grounds for sheep and cattle to the dry northwest mountain pastures. However, such as goats, poultry, and especially pigs are raised everywhere. According to 1950 estimates, Communist China had in 1950 28,812,000 cattle, 17,190,000 sheep, 376,000 hogs, 34,110,000 goats, and 11,000 buffalo.

Industry. Industrially, China is still in its infancy. Development has been made in the erection of textile mills, silk flour mills, match factories, tanneries, and a few steel and cement mills. The pro-

consumer's goods far exceeds that of the producer's goods, which must still be exported.

The communist regime is reported to be depending upon Manchuria as China's main industrial center and to be shifting some industries to the northwest.

According to official reports, the mainland and its satellites accounted for 90 percent of Communist China's trade in 1957. Major exports include textiles and cotton, tung oil, and pig bristles.

PHYSICAL FEATURES AND RESOURCES.

China has about $1\frac{1}{4}$ times the area of the continental United States. Its coast is roughly a semi-circle, about 2,150 miles long. The greater part of the country is hilly or mountainous, and only in the lower reaches of the Hwang Ho (Yellow) and the Kiang rivers are there extensive plains.

The principal mountain ranges are in Shan, to the northwest; the Kunlun, which attains a maximum height of 23,890 feet, running south of the Hwang Ho; and the Tsinling, connecting the Kunlun with the borders of China and Tibet. Manchuria is largely an undulating plain connected with the north China plain by a lowland corridor. Inner Mongolia is the relatively fertile southern and eastern portions of the Gobi. The large island of Hainan (13,500 sq. mi.) lies off the southern coast.

Geographically, China proper consists of three great river systems. The northern part of the country is drained by the Hwang Ho river, 2,700 miles long and unnavigable. The central part is drained by the Yangtze Kiang, the fifth longest river in the world (3,100 mi.). The Yangtze in the south is about 1,650 miles long and navigable for a considerable distance. In addition, the Amur forms part of the northeastern boundary.

Mineral resources are considerable. Iron ore, far less plentiful than in the United States, is mined principally in the lower reaches of the Yangtze valley and in north China. Tin, copper, and zinc in Yunnan and southwest Szechuan has been a major mineral export. Of other minerals, notably antimony and mercury, China is sometimes the world's largest producer. Lead, zinc, silver, mercury, and gold are also mined. The discovery of uranium has been reported in recent years.

Forests and Fisheries. China urgently needs reforestation. Most remaining forests are on the steep, inaccessible mountain slopes. Bamboo is cultivated in groves throughout the country, especially in the south of the Tsinling mountains.

FORMOSA (TAIWAN)—Status: Province of the Republic of Nationalist China.

Area: 13,885 square miles.

Population (estimated 1959, excluding troops and militia): 10,232,000.

Principal cities (est. 1958): Taipei, 809,169 (capital); Kaohsiung, 371,225 (seaport, industrial center); Tainan, 287,797 (agricultural products).

Foreign trade (1958): exports, U.S. \$168,433,000; (1958) imports, U.S. \$127,652,000* (56% from Japan). Chief exports: sugar (59%), rice (10%), canned pineapple (5%).

Agricultural products (est. 1958, in metric tons): sugar, 867,847; rice (paddy), 1,894,127.

Manufactures (1957): cement, 603,933 metric tons; cotton cloth, 130,000,000 sq. yd.; paper, 59,634 tons; aluminum, 8,700 tons; steel bars, 67,900 tons.

Minerals: coal (1958: 3,181,000 metric tons), gold, petroleum, silver, sulfur.

* Excludes U.S. aid imports (\$95,374,000) and those with self-provided exchange (\$16,580,000).

STATUS IN THE WORLD TODAY

Despite attempts by the Soviet Union to obtain both *de jure* and *de facto* recognition of the Communist regime as the government of China, the Nationalist government now located on Taiwan is still recognized by the United Nations, the United States, and a number of other nations as the legitimate government of the mainland territory. President Chiang Kai-shek still hopes to reconquer the China over which he once ruled, and the Taiwan regime consequently maintains an armed force of more than 600,000 men. Similarly, the Communist regime in Peiping has pledged itself to "liberate" Taiwan and make it part of Red China. Currently a United States promise to defend Taiwan against aggression has discouraged any Communist invasion threats, and its assistance in protecting shipments of supplies to the offshore islands of Matsu and Quemoy, held by Nationalist forces, has cut down actual hostilities to desultory exchanges of artillery shells. In March, 1960, President Chiang was re-elected for a third six-year term by the National Assembly.

Economically, the Taiwan regime is dependent upon American aid, although it has made great strides in increasing both agricultural and industrial output. Although trade with both the United States and Japan has been considerably expanded, there is still an unfavorable balance of payments. Capital needs for economic development are still too great to be met locally, and military costs far exceed revenues available to the government.

HISTORY AND GOVERNMENT. Formosa is a large island in the western Pacific, separated from China to the west by the Taiwan straits (narrowest point, 90 mi.).

The Pescadores (Bokoto) and other outlying islands (about 78 sq. mi.) became administratively a part of Formosa under Japanese rule. Formosa, ceded to Japan in 1895 after the Chinese-Japanese War, remained Japanese until it was restored to China in 1945, in accordance with the Cairo conference of 1943. It was the only territory under the control of the Nationalist regime after 1949. Under a 1955 mutual-defense treaty the United States is committed to defend Formosa and the Pescadores.

Formosa's internal affairs are administered by the provincial government headed by the Governor appointed by the Nationalist government. The provincial assembly is elected by direct popular vote.

Most of the inhabitants are of Chinese stock. There are also about 180,000 aboriginal tribesmen in the interior.

Formosa is essentially an agricultural country with the greater part of the population dependent on farming. It is self-sufficient in most basic foodstuffs and produces surpluses of a number of others, notably rice and sugar. Farms are generally small (average, 3 ac.). Cattle and water buffalo are the chief livestock.

Food processing is the island's major industry; it engaged over 6,000 plants in 1955. The textile industry is expanding, and industrial potential was increased by the first four-year program (1953-56).

The island is one of the world's chief sources of camphor, and government monopolies of camphor, salt, opium, and tobacco have been established. Forest resources are enormous.

Formosa is divided by a central mountain range running from north to south, which rises sharply on the east coast and declines gradually to the broad western plain, where cultivation is concentrated.

TIBET—Status: Nominally independent; under Chinese Communist control.

Area: 469,413 square miles.

Population (census 1953): 1,273,969.

Capital: Lhasa (about 20,000).

Ruler: the Panchen Lama.

Monetary unit: Sang.

Exports: wool, live animals, salt, hides, borax, tea, musk.

Agricultural products: barley, fruits, pulse, vegetables.

Minerals: borax, salt, coal, gold.

STATUS IN THE WORLD TODAY

The complete suppression of autonomous government in Tibet in March, 1959, by Red Chinese troops has been cited as an example of Asian imperialism and has caused doubts in some Asian countries as to the validity of Communist China's pledge at the Bandung Asian conference

to practice "peaceful co-existence" "non-interference in the internal affairs of other countries." Although Peiping promised to respect Tibet's autonomy in a treaty signed in 1951, it immediately violated the treaty through systematic oppression and tyranny which finally brought about a revolt in 1959. The ruling Dalai Lama was forced to flee to India and a Panchen Lama, chosen by Peiping, was installed as puppet ruler. Since then, according to Tibetan exiles, the Chinese have embarked upon a policy of forced labor and compulsory exactions, confiscation of property, execution of leading Tibetans, and destruction of national, ethnic, and religious groups of Tibet which amount to genocide.

HISTORY AND GOVERNMENT. Tibet, in the north and northeast of the Himalayas, is the highest country in the world, averaging 16,000 feet in elevation and has many peaks ranging up to more than 25,000 feet. Chinese suzerainty over Tibet was established in the eighteenth century. The area was invaded by a British expeditionary force in 1904, but the Anglo-Russian Convention of 1907 recognized China's influence and stipulated that neither Russia nor Britain should interfere in Tibet's affairs.

Chinese Communist troops invaded the area in October, 1950. An agreement signed with Communist China in May, 1951, recognized the Dalai Lama as spiritual ruler but made Tibet virtually a Chinese province.

The religion and predominant factor in Tibet's social system is Lamaism, a form of Buddhism modified by animism and primitive magic. Education is in the control of the many monasteries, some of which have more than 1,000 monks. A large number of the population are laymen, mostly celibates. Both polyandry and polygyny are practiced.

Colombia (Republic) (República de Colombia)

Area: 439,519 square miles.

Population (est. 1959): 13,824,000 (75% tizos 68%; white, 20%; Indian, 7%; Negro, 5%).

Density per square mile: 31.5.

President: Alberto Lleras Camargo.

Principal cities (est. 1959): Bogotá, 1,124,770 (capital); Medellín, 578,940 (industrial); Cali, 545,410 (coffee, mining); Barranquilla, 411,330 (seaport); Bucaramanga, 184,680 (industrial center); Cúcuta, 167,980 (seaport).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Colombia did not believe that a dictatorship was justified merely because the country was economically prosperous. The regime of General Rojas Pinilla, who took power with the backing of the army in 1953 and had himself elected president the following year by a constitutional assembly he himself had named, was finally overthrown in May, 1957. A military junta took over until elections were held. The Liberals and Conservatives agreed that for twelve years, in the absence of political peace and preventing military coups, the presidency would alternate between the two parties. Congress would be equally divided between them. The congressional elections of 1958, gave the Liberals a three to two advantage over the Conservatives, and six months later Alberto Lleras Camargo, Liberal, was inaugurated as President. Colombia was primarily a coffee producer until World War II, but with the coming of industrialization, the nation became self-sufficient in cotton and woolen textiles. Then came the establishment of steel, chemical, cement, and metal industries, while agriculture became more diversified. The growth of the economy continued while the political situation deteriorated until the popular revolution of 1957.

Colombia, nearly nine times the size of New York state, is the only country in Latin America with frontage on both the Pacific and the Caribbean. Its northernmost point is one of the first parts of the continent to be visited by Spanish explorers. The first permanent European settlement on the American mainland, was established in 1510.

Granada, as Colombia was called in 1499, was comparatively neglected during the Spanish colonial era. After winning independence from Spain during a ten-year struggle ending in 1824, the country established a republic in 1831, in the area that now is Panamá. An internal civil war plagued Colombia until 1904, when Panamá, with United States support, seceded from the republic.

A century-old boundary dispute with Venezuela almost led to war in 1931, but a settlement was arranged through the League of Nations in 1934-35.

GOVERNMENT. Colombia's President, who chooses his own Cabinet, is elected every four years and is not eligible for immediate reelection. The Senate—upper house of Congress—has 80 members elected for four-year terms by direct vote. The House of Representatives of 148 members is directly elected for two years. Congress was superimposed temporarily by a national constitutional assembly in 1954. All citizens over

21 may vote. On December 1, 1957, a popular plebiscite amended the Constitution establishing parity for 12 years between the Liberal and Conservative parties in both Houses of Congress and in the regional legislatures and municipal councils, in the Supreme Court, the central government, and the regional cabinets. In December, 1958, some seven months after President Camargo was elected, former President Pinilla was found guilty by the Senate of having violated the Colombian Constitution and of "abuse of power by improper conduct in the exercise of the office of President."

ECONOMIC CONDITIONS. Most of the people live by farming and cattle herding, but only a small part of the land is cultivated, and that by primitive means. Colombia's coffee, the nation's principal crop, is a mild variety that does not compete with Brazilian types. Cattle numbered 13,390,000 in Dec., 1957, according to U.S. government estimates.

The leading manufacturing industries are foodstuff processing, textiles and beverages. A new steel plant went into operation late in 1954; production in 1958 was 121,053 metric tons of steel ingots and 112,000 metric tons of rolled-steel products.

Leading exports in 1958 were coffee (78%), petroleum (15%), and bananas (20%). Leading customers were the U.S. (70%), West Germany (9%), Netherlands Antilles (5%), and Sweden (2%); leading suppliers, the U.S. (59%), Germany (12%), Britain (4%), and France (4%).

NATURAL FEATURES AND RESOURCES. Through the western half of the country, three Andean ranges run north and south, merging into one at the Ecuadorian border. The eastern half is a low, jungle-covered plain, drained by spurs of the Amazon and Orinoco, inhabited mostly by uncivilized Indians. The fertile plateau and valley of the eastern range is the most densely populated part of the country.

Rich in minerals, Colombia has the third largest oil industry in Latin America (70 per cent controlled by U.S. interests). The country is also rich in platinum and has world-famous emerald mines at Muzo in the eastern Andes.

Forest products include vanilla, quinine, ipecac, sarsaparilla, gums and balsams, tanning agents, and dyewoods.

Congo, The Republic of the (Leopoldville)*

Area: 904,991 square miles.
Population (est. 1957): 13,290,687 (115,804 non-Africans).

* As distinguished from Republic of the Congo (Brazzaville), formerly French.

Density per square mile: 14.7.

President: Joseph Kasavubu.

Principal cities (est. 1960): Leopoldville, 360,000 (capital); Elizabethville, 170,000; Stanleyville, 65,000.

Monetary unit: Congolese franc.

Languages: Kiswahili, Tshiluba, Lingala, Kikongo.

Religions: Fetishism, Roman Catholic (4,200,439), Protestant (812,608), Moslem (150,000).

Ethnic groups: Bantu, Sudanese, Nilotics, Pygmies, Hamites.

Costa Rica (Republic)

(República de Costa Rica)

Area: 19,695 square miles.

Population (est. 1959): 1,126,000 (100% white and mestizo, 97.6%; Negro, 1.9% Indian, .4%; Asiatic, .1%).

Density per square mile: 57.1.

President: Mario Echandi Jiménez.

Principal city (est. 1958): San José, 102,297 (capital and only large city).

Monetary unit: Colón.

Language: Spanish.

Religion: Roman Catholic (state).

STATUS IN THE WORLD TODAY

Costa Rica, which has always claimed that it was the only Central American nation which spent more on education than it did on its army, has had a long tradition of democracy. It has generally chosen its chief executives by elections instead of coups d'état and has usually been ruled by constitutional governments instead of military juntas or dictators. It is a country of predominantly small farmers producing excellent coffee for export and crops largely for local consumption.

STATUS IN THE WORLD TODAY

When the former Belgian Congo colony declared its independence on June 30, 1960, its army mutinied, the government was unable to restore order, and a lack of trained public administrators hampered the entire country. The United Nations, summoned to help reestablish normal conditions, flew in troops from neutral countries under U.N. command, but the political situation was complicated by the demand for independence in Katanga, the wealthiest province, and in Kasai as well; and by the inter-party bickering which, contrary to expectation, had not been eliminated by selecting the head of one party as President and the head of another party as Premier. Since the strife was domestic, the U.N. refused to interfere.

HISTORY AND GOVERNMENT.

Costa Rica, discovered and probably named by Columbus in 1502, proclaimed its independence in 1821. It was part of a federation of Central American states until 1848, when the Republic of Costa Rica was established. A military dictatorship by Tomás Guardia was in effect most of the time from 1848 to 1882, but then constitutional government prevailed except for a brief period, 1917-1919.

Aside from boundary disputes with Nicaragua and Panama, Costa Rica's modern history was comparatively tranquil until 1948. A disputed presidential election caused internal disturbances which ended with the 1949 elections and a new constitution.

Under the 1949 Constitution the President and one-house Congress of 45 members are popularly elected for terms of four years.

The army was abolished in 1950. There is a police force of 1,000 and 700 coast guardsmen.

ECONOMIC CONDITIONS. Coffee, banana, abacá fiber, and cacao are the basic products of Costa Rican agriculture.

Leading customers in 1957 were the U.S. (52%), West Germany (25%), and Canada (9%); leading suppliers, the U.S. (55%), West Germany (9%), and Britain (5%). Leading exports were coffee (49%), bananas (39%), and cacao (5%); imports included textiles, machinery, vehicles, and petroleum products.

HISTORY AND GOVERNMENT. The first thorough exploration of the (Belgian) Congo was sponsored by King Leopold II of Belgium. In 1885 he was recognized by the great powers as personal sovereign and proprietor of the Congo Free State, as it was then called. Four years later he turned his rights over to Belgium. After World War II, as independence movements spread through Africa, unrest in this area brought attempts at reform by Belgium. However, riots in Leopoldville beginning in January, 1959, led to a timetable for granting self-government which came to an abrupt end when violent outbreaks caused Belgium to withdraw.

ECONOMIC CONDITIONS. The mineral-rich Congo (not to be confused with the former French Congo colony, which also calls itself the Republic of the Congo) is one of the world's most important sources of uranium. It also is a source of copper (40 per cent of its exports), tin, diamonds (mainly industrial), gold, cobalt and zinc. In 1957, when foreign trade figures still included the U.N. trust territory of Ruanda-Urundi, exports amounted to 23.9 billion francs, imports to 21.8 billion.

RAI FEATURES AND RESOURCES.
Costa Rica is tableland, from 3,000 to 6,000 feet above sea level. Cocos Island (50 mi.), about 300 miles off the Pacific coast, is under Costa Rican sovereignty, although it is mostly tropical. It is of potential strategic importance in the defenses of the Panama Canal.

Mountain slopes yield such forest products as balsa, cedar, dyewood, mahogany and rosewood.

Cuba (Republic) (República de Cuba)

Area: 44,217 square miles.
Population (est. 1958): 6,466,000 (white, 75%; mulatto, 14.5%; Negro, 12.4%; Chinese, 0.3%).
Density per square mile: 146.2.
President: Osvaldo Dorticos Torrado.
Prime Minister: Fidel Castro.
Principal cities (census 1953): Havana, 1,200,000 (capital, industrial center); Mariel, 192,778 (Havana suburb); Santiago de Cuba, 163,237 (seaport, mining); Camaguey, 103,388 (cattle, sugar); Santa Clara, 100,000 (tobacco).
Currency unit: Peso.
Language: Spanish.
Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Cuba, under the leadership of Fidel Castro, has become the first and only open communist state of the Soviet orbit in the Western Hemisphere. The military dictatorship of Fulgencio Batista, which the Castro forces overthrew on Jan. 1, 1959, under the pretext of bringing democracy to the country, has been replaced by an authoritarianism. Politically and economically, Cuba has aligned itself completely with the Red bloc, with the custodial attacks on United States "capitalist imperialism."

The first step which brought Castro into power was the nationalization of the United States sugar and cattle industries as a land-reform program. The owners were not compensated, although they had promised payment in the form of 10-year government bonds, which Castro did not consider just compensation. The land which was then given to peasants' "cooperatives" appeared to have been nationalized as government-owned, collective property.

Cuba continues its purchases of American oil because its economic policies had led to depletion of its dollar exchange, and it had an agreement with the U.S.S.R. to handle the Russian crude were it to be confiscated. The United States

was finally forced to retaliate by cutting the sugar quota, under which Cuban sugar was purchased at a price well above the world market. Castro then began seizing virtually every American property of any importance in Cuba. Russia agreed to purchase the excess sugar—but probably only at world market prices. Soon thereafter Castro announced recognition of the Red Chinese government.

The pro-Communist policy of the new régime disenchanted a great many Castro supporters who had thought they were fighting for democracy. His first hand-picked President, Dr. Manuel Urrutia, resigned after assailing communism. Many other officials and private citizens fled the country. Nor did Castro's actions endear him with other Latin American nations, where he had counted on sympathetic support. His attempts to obtain official hemispheric denunciation of "economic aggression" by the U.S. failed completely.

HISTORY. The history of Cuba, largest of the many Caribbean islands, began for white men with discovery by Columbus on his first voyage in 1492. It was a Spanish colony until 1898, except for brief British occupancy in 1762–63. Open war raged between Cuban rebels and Spanish troops from 1867 to 1878. Fighting broke out again in 1895, and when the United States threatened to intervene, Spain felt its national dignity had been wounded. Strained relations between Spain and the U.S. led to war when the U.S. battleship *Maine* was blown up in Havana harbor in February, 1898. At the termination of the brief Spanish-American War, Spain gave up Cuba.

Until creation of the Cuban republic in 1902, the island was ruled by United States military authorities. For the first thirty-two years of the republic's life, the United States held the right to intervene in any crisis—a right which was invoked during insurrections which occurred in 1906, 1912 and 1917.

GOVERNMENT. Before the fall of Batista, Cuba's President was elected for a four-year term by direct, popular, universal, and compulsory vote. The Cabinet, though named by the President, was responsible to the Congress—a 54-member Senate and a 130-member House, both elected for four years. Much Cuban lawmaking is done through presidential decree, reviewable by the Supreme Court. On January 6, 1959, the provisional President dissolved Congress and assumed legislative powers, and on February 8, 1959, he signed a provisional Fundamental Law of Cuba.

ECONOMIC CONDITIONS. Half of the employed are engaged in agriculture, which normally accounts for more than 90 per cent of the exports. About two-thirds of

the cultivated area is devoted to sugar cane. Other important crops are tobacco, coffee, cacao, fruits, vegetables, henequen, corn, pineapples, and rice.

Manufactured products include sugar, molasses, syrup, brandy, rum, alcohol, cigars, cigarettes, cigar boxes, sponges, cement, cordage, salt, dressed hides, dairy products, and canned goods. The leading industry is the processing of sugar cane and its products.

Leading exports in 1958 were sugar (76%), tobacco and products (7%), and molasses (4%). Leading customers were the U.S. (67%), Japan (6%), and Britain (5%); leading suppliers, the U.S. (70%), Japan (6%), Britain (3%), Canada (2%), Spain (2%), and India (2%).

NATURAL FEATURES AND RESOURCES. Long, narrow Cuba has mountainous areas in the southeast, central area, and west, but the rest of the country is flat or rolling. The coastline is indented by many large bays.

Rich mineral beds, mostly in the eastern province of Oriente, include iron, copper, manganese, chromium and nickel. Iron ore reserves are 90 per cent held by U.S. steel interests. Virtually all mineral exports go to the United States; they include nickel, copper ore, and manganese ore.

Cyprus (Republic)

Area: 3,572 square miles.

Population (est. 1958): 549,200 (Greek Cypriots, 78.8%; Turkish Cypriots, 17.5%; Armenians, Maronites, Latins and others, 3.7%).

Density per square mile: 153.7.

President: Archbishop Makarios.

Vice-President: Dr. Fazil Kutchuk.

Principal cities: Nicosia, 81,700 (capital); Limassol, 36,500; Famagusta, 26,800.

Monetary unit: Cyprus pound.

Languages: Greek, Turkish, English.

Religions: Greek Orthodox, Moslem.

STATUS IN THE WORLD TODAY

Cyprus, which achieved its independence Aug. 16, 1960, after more than 2,000 years of foreign domination, remained part of the NATO defense network in the Middle East. Britain retained two bases on the island.

HISTORY AND GOVERNMENT. Cyprus, third largest island in the Mediterranean, is roughly equidistant from Asia Minor to the north and Syria to the east. The site of early Phoenician and Greek colonies, it passed in 1571 from the rule of Venice to that of the Ottoman Empire, under which it remained until 1878, when it was ceded to Great Britain for administrative pur-

poses. On the outbreak of hostilities with Turkey in World War I (Nov. 9, 1914), the island was formally annexed to Great Britain. Demands for self-determination and union with Greece (enosis), which had been accompanied by terrorism several years, finally ended in February 1959, when Britain, Turkey, Greece and representatives of the Turkish and Greek communities in Cyprus signed an agreement providing for the establishment of an independent Cypriot Republic.

Under the republic's constitution, the protection of the Turkish minority is the Vice-President as well as three of the cabinet ministers must be from the Turkish community, while the House of Representatives shall be elected by each community separately, 70 per cent Greek Cypriot and 30 per cent Turkish Cypriot representatives. Another unusual feature, that the two virtually self-governing communities have considerable legislative powers over their own communal affairs. The Greek Communal Chamber has 30 members, including one Armenian and one Maronite, while the Turkish Chamber has 30. Each community has the right to elect the number of members in its own chamber.

ECONOMIC CONDITIONS. Agriculture is the principal industry of the island. Sponge fishing as well as copper mining are also important. In 1956 34% of its exports went to West Germany, while 45% of its imports came from Britain. Principal exports are cupreous concentrates (32%) and pyrites (27%). The chief agricultural products are barley, wheat, potatoes, and fruit.

Czechoslovakia (Republic)

(Československá Republika)

Area: 49,354 square miles.

Population (est. 1959): 13,564,000 (19% Czech, 67.0%; Slovak, 23.7% German, 3.2% Magyar, 3.2%; Polish, Jewish and others, 2.9%).

Density per square mile: 274.8.

President: Antonín Novotný.

Premier: Vilém Široký.

Principal cities (est. 1958): Prague (Praha), 984,722 (capital, industrial center); Brunn (Brno), 309,313 (textiles); Bratislava, 252,046 (Danube port); Ostrava (Moravska Ostrava), 227,287 (iron and steel products); Pilsen (Plzeň), 133,000 (Skoda steel works).

Monetary unit: Koruna.

Languages: Czech (67%), Slovak (23.7% German (4%), Hungarian, Ukrainian, Polish.

Religions (est. 1947): Roman Catholic 77%; Czechoslovak Church, 8%; Protestant, 7%; Greek Orthodox, .5%; Jewish, .5%; others and no confession, 7%.

STATUS IN THE WORLD TODAY

omically, Czechoslovakia is the most important satellite the Soviet Union has, with the possible exception of East Germany. It was the most highly industrialized nation taken over by the Communists in the wake of World War II. Naturally, it is also important in the scheme of things because, next to Poland, it has the highest percentage of land and farm families organized in co-operatives. Even so, in the process of industrialization it became an exporter of foodstuffs and depends upon the Soviet Union for raw materials to keep its industries going. In return it is a chief supplier to the U.S.S.R. of steel, iron, and engineering products, shoes, textiles, and arms and armaments.

Naturally, Czechoslovakia is under the control of the Communist party. Its foreign policy follows the Moscow line faithfully. The Czechs, whether Communist or not, still hold a measure of resentment against the Germans for having let them down in 1938 and are uneasy over the possibility that some or all of the 300,000 Sudeten Germans expelled after World War II might return. But underneath the serene surface, leaders of the Communist party have noted the following trends: a lack of interest among the Czechs and the workers in identifying themselves with communism; "unhealthy fluctuations" among the workers, such as a tendency to drift into administrative jobs instead of against jobs at the bench and a reluctance in extracting economic concessions from the authorities in terms of wages and social benefits. One factor is the pressure on the workers to take the place of the middle class who have taken some managerial positions and have systematically moved to production

the problem inherited from prewar Czechoslovakia which the Communists have tried unsuccessfully to solve is that of relations between the Czechs and Slovaks. The Communists have invested heavily in Slovakia, especially in the primarily agricultural areas, to reduce the economic inequalities between its industrialized areas and that of the Czech lands. In the Czech lands they have established a special regional executive and a provincial assembly, while in Slovakia the supremacy of the central government is manifest and there is abundant evidence of Slovak "separatist" aspirations. Divergent attitudes toward religion also cause conflict.

RELIGION AND GOVERNMENT. It was about the fifth century A.D. that the ancestors of the Czechs and Slovaks settled in the region of modern Czecho-

slovakia. Slovakia passed under Magyar domination, but the Czechs founded the kingdom of Bohemia, which was among the most powerful in Europe for centuries. German encroachment began in the twelfth century and was furthered by the election in 1526 of a Hapsburg as Bohemian King. After the Czechs rebelled in 1618 and were defeated at the Battle of White Mountain in 1620, they were ruled for the next 300 years by the Hapsburgs as part of the Empire of Austria. In World War I, Czech and Slovak patriots, notably Thomas G. Masaryk and Milan Stefanik, went abroad to promote support for Czech-Slovak independence, while Czechoslovak legions fought against the Central Powers. On Oct. 28, 1918, Czechoslovakia proclaimed itself a republic; shortly thereafter Masaryk was unanimously elected first President.

Between World Wars I and II, Czechoslovakia supported the League of Nations, formed the Little Entente with Yugoslavia and Rumania, and co-operated closely with France. President Masaryk was succeeded by Dr. Eduard Beneš in 1935.

Meanwhile, Czechoslovakia's German minority, led by Konrad Henlein, began demanding autonomy.

At the Munich conference on Sept. 30, 1938, France and Britain agreed that the Nazis could take the Czech Sudetenland on the German border. Dr. Beneš resigned on October 5, and Czechoslovakia became a federal union in the German orbit. The Poles, meantime, seized Czechoslovakia's Teschen area, and Hungary had taken areas in Slovakia and Ruthenia. In March, 1939, the Nazis set up Slovakia as a puppet state, declared Bohemia and Moravia to be Nazi protectorates, and gave Hungary the remainder of Ruthenia. Both Slovakia and Bohemia-Moravia were occupied by German troops. Beneš organized a government-in-exile in London in 1940.

Soon after the government returned to Czechoslovakia in April 1945, Ruthenia, the easternmost province, was ceded to Russia. On July 3, 1946, Communist Klement Gottwald formed a six-party coalition Cabinet. Amid increasing pressure from Moscow, Gottwald's Cabinet remained in office until a bloodless coup d'état of Feb. 23-25, 1948, when the Communists seized complete control. President Beneš resigned June 7 following parliamentary elections in which the Communists and their allies were unopposed. Parliament then elected Gottwald to the presidency.

Czechoslovakia's Soviet-type Constitution makes the 300-member unicameral Parliament the supreme organ of the state. The government is headed by the President, elected by Parliament for a seven-year term. The Prime Minister and his

Cabinet are appointed by the President but responsible to Parliament.

ECONOMIC CONDITIONS. Nationalization of all enterprises with more than fifty employees as well as concerns of any size operating in key industries was completed between 1945 and 1948. Distribution of large estates had already been accomplished by the 1919 Land Reform Law. Total collectivization of agriculture was the professed aim of the Communist regime.

Sugar beets, wheat, corn, and high-grade barley and hops for beer brewing are cultivated in the low-lying areas. In more elevated regions, the cultivation of potatoes, rye, and oats predominates. Higher lands are also used for growing fodder crops or for grazing. In 1958 there were 4,091,000 cattle, 889,000 sheep, and 5,435,000 hogs.

Abundance of coal and presence of iron ore give the country a big metallurgical industry. The Skoda steel works at Pilsen are among the largest in Europe.

Other industries are glass, porcelain, and pottery making, while large forest areas provide raw material for the timber, paper, and cellulose industries. Also highly developed are the textile industries, including cotton, wool, flax, and jute production, and the shoe industry. The famous Bat'a shoe factories are at Zlín.

Foreign trade is a state monopoly managed by government corporations.

NATURAL FEATURES AND RESOURCES. Czechoslovakia lies athwart the great central-European watershed between the Baltic, Black, and North Seas. Mountains form several of its boundaries. Many of the valleys are made fertile by the Danube, Elbe, and Vltava (Moldau) rivers and their tributaries.

Most important of Czechoslovakia's varied minerals are pit coal and lignite, with the principal coal fields in the Ostrava-Karvinná area, connected with the Polish fields of Upper Silesia.

Production of iron ore in 1957 was about 2,810,000 tons; much ore is imported to meet the demands of Czechoslovakia's flourishing iron and steel industry. Excellent porcelain raw materials, particularly kaolin, are obtained in western Bohemia and southern Moravia. Other minerals are antimony, gold, magnesite, oil, uranium, silver, and zinc.

Denmark (Kingdom)

(Kongeriget Danmark)

Area: 16,577 square miles.

Population (est. 1959): 4,541,000 (almost entirely Danish).

Density per square mile: 273.9.

Sovereign: King Frederick IX.

Prime Minister: Viggo Kampmann.

Principal cities (est. 1958): Copenhagen, including suburbs, 942,058 (capital); Århus, 118,205 (shipbuilding); Odense, 113,616 (meat, dairy products); Ålborg, 85,000 (seaport).

Monetary unit: Krone.

Language: Danish.

Religion: Evangelical Lutheran (state).

STATUS IN THE WORLD TODAY

Smallest of the Scandinavian countries, Denmark adheres enthusiastically without reservation to the free world since the current cold war. It has approved construction of seven airfields on Danish soil under the NATO program and despite its small size maintains an army of over 100,000 men, plus 25,000 in the Home Guard. A basic tenet of its foreign policy is friendship with the United States. Its economy depends primarily on the export of dairy and meat products and the earnings of its merchant marine, which is one of the largest in the world on a per capita basis.

HISTORY AND GOVERNMENT.

Smallest of the three Scandinavian countries, Denmark emerged with the establishment of the Norwegian dynasty, the Ynglinger in Jutland at the end of the eighth century. It was subjugated and Christianized by the German King Henry in 934. Canute the Great (1014-1035) conquered England in 1015. In the late twelfth and early thirteenth centuries Denmark became for a time the dominant power in Northern Europe.

Denmark supported Napoleon, for which she was punished at the Congress of Vienna in 1815 by the loss of Norway and Sweden. In 1864 Bismarck, together with the Austrians, made war on the Danish country as an initial step in the unification of Germany. Denmark was neutral in World War I. In 1939 Denmark signed a ten-year pact with Hitler, but less than a year later she was invaded by the Nazis. Fuehrer. King Christian X cautioned fellow countrymen to accept the occupation, but there was widespread resistance against the Nazi occupation. In 1944 Denmark declared its independence from Germany, thus putting an end to a union that had existed since 1380.

Denmark has been a constitutional monarchy since 1849. Legislative power is held jointly by king and parliament. The Constitution of 1953 provides for a unicameral parliament called the Folketing, consisting of 179 popularly elected members serving for four years. The cabinet is presided over by the king, who appoints the prime minister. Women are eligible to succeed to the throne.

R. Frederick IX, of the house of wig - Holstein - Sonderburg - Glücksborn March 11, 1899, became King 20, 1947. In 1935 he married Prinngrid of Sweden, by whom he has daughters: Margrethe (heiress apparborn April 18, 1940), Benedikte (born Anne-Marie (born 1946)).

OMIC CONDITIONS. Livestock in 1958, included 3,268,000 cattle, 5,416, - 24,475,000 poultry.

largest industries are food processand iron and metal. Others includeals and pharmaceuticals wood and clothing, textiles, machinery, bevand leather.

ing suppliers in 1958 were Greata (23%), West Germany (20%), the U.S. and Canada (9%). Chiefers were Great Britain (25%), Germany (21%), the U.S. anda (8%). Leading exports were meat eat products (27%), dairy products, butter and eggs (24%), machinery, and live meat animals (8%). Leadports: coal, coke, petroleum andum products, machinery, vehicles, xtiles.

RAL FEATURES AND RESOURCES. rk, only three miles from Sweden closest point, consists of the Jutpeninsula and the islands in the . The largest islands are Zealand, of Copenhagen; Fünen; and far to t, Bornholm. The narrow waters to th are called Skagerrak; and to the attegat.

terrain of the whole kingdom is low t flat. Its highest point is about 500 d there are many lakes, ponds and rivers. Sand dunes line the western d coast almost without a break.

ral resources are negligible. Large ties of coal and coke must be imPeat bogs supply an important of fuel.

ishing industry, centered at Copenbut carried on also in the shallow and in the deeper waters of the North Sea and Skagerrak, is a basic the Danish economy.

Outlying Territories

OE ISLANDS—Status: Autonoart of Denmark.

540 square miles.

ation (est. 1958): 34,000.

al: Thorshavn (pop. 1955: 6,014).

nor General: C. A. Vagn-Hansen.

lpal products: cod, whale oil, cod, wool, fertilizers, skins and leather.

group of 21 islands, lying in the Atlantic about 200 miles northwest Shetland Islands, joined Denmark and has since been part of the kingdom. The islands were occu-

pled by British troops during World War II, after the German occupation of Denmark. The principal pursuits are fishing and sheep grazing. The Faeroes have home rule under a bill enacted in 1948; they also have two representatives in the Danish Folketing.

GREENLAND—Status: Integral part of Kingdom of Denmark.

Area: 839,782 square miles (almost 85 per cent glacier).

Population (census 1958): 28,000 (native except for 1,269 Europeans).

Capital: Godthaab (second governor's seat, Godhavn).

Governor General: Poul Hugo Lundsteen.

Foreign trade (1956): exports, 43,615,000 kr. (53.5% to Denmark); imports, 78,390,000 kr. (87.2% from Denmark). Chief exports: cryolite (41,792 metric tons), fish and products, hides and skins.

Greenland, the world's largest island, was colonized in 1855-86 by Eric the Red. Danish sovereignty, which covered only the west coast, was extended over the whole island in 1917. In 1941 the United States signed an agreement with the Danish minister in Washington, placing it under U.S. protection during World War II but maintaining Danish sovereignty. A definitive agreement for the joint defense of Greenland within the framework of NATO was signed on April 27, 1951. A large U.S. air base at Thule in the far north was completed in 1953.

Under 1953 amendments to the Danish Constitution, Greenland is part of Denmark and has two representatives in the Danish Folketing. There is a popularly elected council.

Greenland is the world's only source of natural cryolite, important in the manufacture of aluminum. Large deposits of lead, zinc and wolfram were found on the eastern coast after World War II.

Dominican Republic

(República Dominicana)

Area: 18,703 square miles.

Population (est. 1959): 2,894,000 (1950: mestizo and mulatto, 60%; white, 28%; Negro, 12%).

Density per square mile: 154.7.

President: Héctor Trujillo y Molina.

Principal cities (estimated 1957): Ciudad Trujillo, 294,830 (capital; sugar); Santiago de los Caballeros, 66,804 (tobacco); San Francisco de Macoris, 22,223 (sugar); San Pedro de Macoris, 21,350 (sugar port).

Monetary unit: Dominican peso.

Language: Spanish.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

The Dominican Republic, one of two remaining dictatorships in the Caribbean

area, has been under the thumb of Rafael Leonidas Trujillo, who now calls himself Generalissimo, since 1930. He has permitted no freedom of press or speech or opposition political parties except for a brief period in 1946-47, when he allowed the Communists to function openly and then sent the leaders into exile. Even government officials belonging to the country's one political party, which he heads, have learned of their "resignations" in the newspapers. His enemies have disappeared mysteriously in Cuba, Mexico, Haiti, and the United States. It is generally believed that he is a silent partner in many business enterprises in the country, since none can function without his approval.

Despite the lack of freedom in his own country, Trujillo supports the Free World in the field of foreign affairs and has offered land for settlement by refugees from European persecution. Since the overthrow of the Batista regime in Cuba—Ciudad Trujillo sheltered both Batista and ex-President Perón, of Argentina—he apparently has worried about an insurrection against his administration launched from nearby democracies. Late in 1960, under a resolution adopted by the Organization of American States, the American republics broke off diplomatic relations with the Dominican Republic on charges it had plotted to assassinate the President of Venezuela.

A positive aspect of the Trujillo regime has been its economic policy. It has built modern housing for the workers, more schools for children, diversified the economy, which was formerly dependent entirely on sugar production, and stimulated moderate industrialization. Santo Domingo, the capital, was completely rebuilt after a shattering earthquake and then renamed by Trujillo for himself. New hotels have been constructed in an attempt to attract tourists.

HISTORY. The Dominican Republic (formerly San Domingo) occupies the eastern two-thirds of the island which Columbus named La Española (now Hispaniola) when he discovered it on his first voyage in 1492. The other third is occupied by the republic of Haiti. The capital, Ciudad Trujillo, founded in 1496, is the oldest white settlement in the Western Hemisphere.

The Dominican Republic was variously under Spanish, French and Haitian domination until it established its independence in 1865 and then plunged into an unstable political history. U.S. Marines occupied it from 1916 to 1924, when a new Constitution was adopted. In 1930, Rafael Leónidas Trujillo y Molina, an army general, was elected President. The Dominican Republic has a bicameral Congress with both Senators and Deputies elected by

direct vote for 5 years. The President also elected by direct vote for 5 years but he may be re-elected indefinitely and may be removed by decree without Congressional approval.

ECONOMIC CONDITIONS. Primarily agricultural, the country produces sugar, coffee, cacao, tobacco, bananas, rice, corn, cassava, beans, and sweet potatoes. Cattle raising is of growing importance.

Sugar refining is the only important industry, although several new industries have been established in recent years.

Leading exports in 1958 were sugar (42%), coffee (18%), and cacao (18%). Chief customers were the U.S. (40%) and Britain (25%); leading suppliers, the U.S. (62%) and West Germany (6%). The main imports are cotton goods, iron and steel products, chemicals, and machinery.

NATURAL FEATURES. Crossed from northwest to southeast by a mountain range with maximum elevations exceeding 10,000 feet, the country has fertile, well-watered land on the northeast side, where nearly two-thirds of the population live. The southwest part is arid and with poor soil except around Ciudad Trujillo. The country has many good harbors.

Ecuador (Republic) (República del Ecuador)

Area: 105,743 square miles.

Population (est. 1959): 4,169,000 (1940 est. 3,400,000). Race: 50% mestizo, 41%; Indian, 39%; white, 10%; Negro, 5%; others, 5%.

Density per square mile: 39.4.

President: Jose M. Velasco Ibarra.

Principal cities (est. 1959): Guayaquil, 410,000 (chief port); Quito, 267,700 (capital); Cuenca, 66,800 (trading center); Ambato, 44,300 (commercial center).

Monetary unit: Sucre.

Languages: Spanish, Quéchua.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Although Ecuador has rich natural resources, its economic development on a large scale has been hampered by poor communications and the geographic fact that it is cut up into five regions by ranges of the Andes mountains. World War II gave it a start toward a better economic future when the demand for war materials boosted its exports of quinine, balata, wood, rubber, oil, and kapok, but the opening up of undeveloped territory is still a big job. Its principal exports are bananas, cocoa and coffee. Construction of a steel mill may lead to exploitation of such items as copper, manganese, and oil. The country, however, has been relatively free of problems which have beset other nations—political and economic instability and in recent years its currency has been

ly stable, while the rise in the cost of living has not been so great as in other American countries. Loans will be necessary for any long-range economic development, since its own resources are inadequate.

CLIMATE. Mostly forested and mountainous, with a little larger than Colorado. It has a long history replete with the successful rule of dictators. The Spanish conquistador Francisco Pizarro conquered the Incas in 1532 by defeating the Inca Atahualpa. The first revolt against Spain occurred in 1809, but the victory was not complete until the Battle of Pichincha on May 24, 1822. Ecuador then joined Venezuela and Colombia in a confederacy known as the Gran Colombia, but withdrew amicably and became independent in 1830. The country's recent history has been largely one of military dictatorships.

More than a hundred years, Ecuador has had its boundary with Peru, frequently resorting to arms. After hostilities ended in 1941, both nations submitted to mediation, and in 1944 Ecuador won the disputed area. The dispute broke out anew in 1951.

GOVERNMENT. Under the 1946 (16th) constitution, Ecuador elects a President for five years by direct vote, and he is eligible for further service until at least one year after he intervenes. The Congress is bicameral, with a Senate and Chamber of Representatives.

ECONOMIC CONDITIONS. Although agriculture is the basis of Ecuador's economy, only about 12,000,000 acres are devoted to it. The chief crop, is grown in coastal and lower river valleys. The plateau and mountain valleys are used for cattle and dairying, and raising cereals and potatoes. After textiles, one of Ecuador's main industries is the manufacture of straw hats, made of Toquilla straw. Exports in 1958 were bananas (19%), coffee (19%), and cacao (15%). The chief customers were the U.S. (57%), Great Britain (12%), and Colombia (5%); other customers, the U.S. (49%), West Germany (13%), and Belgium (8%).

PHYSICAL FEATURES AND RESOURCES. The country is bounded by the Andes, with high and parallel ranges of the Andes, running along Ecuador from north to south, and separated by tall volcanic peaks. The country produces gold, silver, copper, and petroleum. It is the world's chief producer of light, strong balsa wood.

Area: 386,100 square miles.

Population (est. 1958): 24,781,000 (1944: 22,000,000). Egyptian, 95.4%; Arabian, 1.7%; Greek, 1.6%; others, 2.3%.

Density per square mile: 64.2.

President: Gamal Abdel Nasser.

Principal cities (est. 1956): Cairo, 2,673,800 (capital); Alexandria, 1,261,100 (chief port); Port Said, 208,100 (Suez Canal terminus); Tanta, 164,800 (railroad center, Nile delta).

Monetary unit: Egyptian pound (£E).

Language: Arabic.

Religions: Moslem, 91%; Christian (mostly Copt and Greek Orthodox), 8%; others, 1%.

STATUS IN THE WORLD TODAY

The primary objective of President Nasser since he took over the regime in Egypt, and later included Syria in the United Arab Republic, has been to become the leader of all Arab states in opposition to the Western nations, which he considers colonial and imperialist. His fortunes have risen and fallen in this respect in direct proportion to his diplomatic successes and failures. When he nationalized the Suez Canal, he became a hero in the Arab world because he had presented Great Britain and France with a *fait accompli* about which they could do nothing without being branded aggressors. Yet when they did intervene in 1956, at the time of Israel's attack against Egypt, the speed with which the Israeli armed forces overwhelmed Egypt's army in the Sinai peninsula dealt a severe blow to Nasser's military prestige. His interference in the internal affairs of other Arab states in trying to make himself the head of a Pan-Arab movement brought him in conflict with other Arab leaders. Jordan and Lebanon reacted violently against Radio Cairo's propaganda. Saudi Arabia was less than happy as its oil royalties dropped because Egyptian sabotage of the Suez Canal blocked oil shipments to Europe. Tunisia broke off diplomatic relations because of Egypt's interference. The Sudan stressed its independence after more than half a century of being governed jointly by Egypt and Great Britain.

Relations with these other Arab states began to improve, however, with the increase of Communist influence in the Middle East. Nasser had assigned 80 per cent of Egypt's cotton crop to the Soviet bloc in return for armaments and help in constructing the Aswan High Dam. But the U.S.S.R. was dumping Egyptian cotton on the world market at prices below those charged by Egypt, and Egyptian importers were becoming irritated at the poor quality of goods they were receiving from behind the Iron Curtain. Egypt was willing to accept Soviet aid, but it was definitely annoyed at any Communist attempts

Egypt (Province of U.A.R.)

(Misr)

and Syria united in February, 1958, to form the United Arab Republic.

to share in any Arab government, a fact which led Nasser to denounce Arab Communists and to accuse the Soviet Union of working against true Arab nationalism in Iraq. Cairo is now soft-pedaling its propaganda broadcasts, which formerly were aimed at inciting pro-Nasser agitation against established regimes, and is working at mending its political fences in the Arab world. It is still willing to accept economic aid from the Soviet Union, especially in connection with construction of the Aswan Dam, but is increasingly aware of the danger of Communist political activity. It still has one thing in common with the other Arab states—its hatred of Israel—on which to build its Pan-Arab hegemony.

In September, 1959, the Soviet Union finally signed a contract for technical assistance and equipment for the first stage of the dam.

HISTORY AND GOVERNMENT. Egyptian history dates back to about 4000 B.C., when the kingdoms of upper and lower Egypt, already highly civilized, were united. Egypt's "Golden Age" coincided with the eighteenth and nineteenth dynasties (sixteenth to thirteenth centuries B.C.), during which the empire was established. Persia conquered Egypt in 525 B.C.; Alexander the Great subdued it in 332 B.C., and then the dynasty of the Ptolemies ruled the land until 30 B.C., when Cleopatra, last of the line, committed suicide and Egypt became a Roman province. From 641 to 1517 the Arab Caliphs ruled Egypt, and then the Turks took it and made it part of their Ottoman Empire. Napoleon's armies occupied the country from 1798 to 1801. In 1805, Mohammed Ali, leader of a band of Albanian soldiers, became Pasha of Egypt. After completion of the Suez Canal in 1869, both the French and British took increasing interest in Egypt.

British troops occupied Egypt in 1882, and British resident agents became its actual administrators, though it remained under nominal Turkish sovereignty. On December 18, 1914, this fiction was ended and Egypt became a protectorate of Great Britain.

Pressure by Egyptian nationalists forced Britain to declare Egypt an independent, sovereign state on Feb. 28, 1922, although the British reserved rights for the protection of the Suez Canal and the defense of Egypt. On Aug. 26, 1936, by an Anglo-Egyptian treaty of alliance, all British troops and officials were to be withdrawn, except from the Suez Canal zone. When World War II started, Egypt remained neutral. British imperial troops finally ended the Nazi threat to Suez in 1942 in the battle of El Alamein, which took place west of Alexandria.

In Oct., 1951, Egypt abrogated the 1936 treaty and the 1899 Anglo-Egyptian condominium of the Sudan. (See Sudan.) Rioting and attacks on British troops in the Suez Canal zone followed, reaching climax in Jan., 1952. The army, led by Gen. Mohammed Naguib, seized power on July 23, 1952. On July 26, King Farouk abdicated in favor of his infant son. Naguib took over the premiership on Sept. 7, 1952, and promised far-reaching reforms. The monarchy was abolished and a republic proclaimed on June 18, 1953, with Naguib holding the posts of both provisional President and Premier. He relinquished the latter post on April 18, 1954, to Gen. Abdel Nasser, leader of the ruling military junta. Naguib was deposed by the Cabinet and junta on Nov. 14, 1954.

Nasser was confirmed as President in a popular referendum on June 23, 1954. According to the provisional Constitution of the United Arab Republic announced by Nasser in February, 1954, legislative power is vested in a "Council of the Nation" composed of members chosen by decree of the President of the United Arab Republic. Executive power is vested in the President of the United Arab Republic, who is assisted by Ministers appointed by him and responsible to him. Political parties have been abolished. Nasser for an indefinite period. In addition to the organs set up for joint jurisdiction over Egypt and Syria, certain executive organs were created to deal separately with these two provinces of the U.A.R. As of October 7, 1958, Egypt has a 15-member Executive Council appointed by and responsible to the President of the U.A.R.

SOCIAL AND ECONOMIC CONDITIONS. The majority of the people are Sunnis. Moslems. The Christians are mainly Copts with an admixture of Armenian, Syrian, and Maronite sects. The population divides generally into fellahin (peasantry) or townspeople of the same blood, the Bedouin, or nomad, Arabs of the desert, and the Berbers, who occupy the Nile valley between Aswan and Dongola. The foreigners are chiefly Greeks (whose main center is Alexandria), French, British and Italians. The density of population in this small inhabited area in the Nile valley and delta (about 13,600 sq. mi.) is far greater than that of either the Netherlands or Belgium.

Agriculture is the chief industry, engaging more than half the population. Only about 3.5 per cent of the total area is arable, and only about 6,000,000 acres are actually under cultivation, almost entirely in the Nile valley and delta. More than half the cultivated area comprises farms of less than 20 acres. Irrigation

nsable to agriculture; the Aswan
r above the first cataract of the
lds up to 5,500,000,000 cubic meters
r and the reservoir of Gebel Aulia,
Sudan, 2,000,000,000 cubic meters.
delta and in middle Egypt, where
al or canal irrigation is possible,
three crops a year can be grown.
ief cash crop is cotton, of which
s one of the world's leading pro-
(93,000 metric tons).

stry includes sugar refining, cotton
g, cement manufacture, milling and
soap and perfume making. The
Company of Egypt holds a monopoly
sugar refining industry.

957, Egypt's chief customers were
lovakia (15%), Japan (7%), West
y (7%), and the Sudan (6%);
suppliers, the Soviet area (22%),
ited States and Canada (9%),
, (12%), West Germany (11%),
ly (6%). Leading exports were raw
(72%) and rice (7%).

ts included wheat, petroleum, ferti-
ron and steel products, textiles, and
ery and vehicles.

able throughout its course in
the Nile is used largely as a means
p transport for heavy goods. The
al port is Alexandria.

AL FEATURES AND RESOURCES.

at the northeast corner of Africa,
rough square, with the historic
wing northward through its east-
rd. On either side of the Nile
are desert plateaus, spotted with
n the north, toward the Mediter-
plateaus are low, while south of
ey rise to a maximum of 1,015 feet
a level. At the head of the Red Sea,
northeast corner of Egypt, is the
ar Sinai peninsula, between the
anal and Israel.

Nile delta starts 100 miles south of
Mediterranean and fans out to a sea
155 miles between Alexandria and
aid. From Cairo north, the Nile
s into many streams, the principal
h are the Damietta and the Ro-
oined by a network of canals.

most important minerals are manga-
e, phosphate, and petroleum. Gold,
hres, nickel, sodium carbonate,
talc, and tungsten also are mined.

t for a narrow belt on the Medi-
n, Egypt lies in an almost rainless
which high daytime temperatures
ckly at night.

ANAL. The Suez Canal, in Egyptian
y between the Arabian Desert and
al peninsula, is an artificial water-
out 100 miles long between Port
the Mediterranean and Suez on
Sea. Construction work, directed

by the French engineer Ferdinand de Les-
seps, was begun April 25, 1859, and the
canal was opened Nov. 17, 1869. The cost
was 432,807,882 francs. The concession is
held by an Egyptian joint stock company,
*Compagnie Universelle du Canal Maritime
de Suez*, in which the British government
holds 353,504 out of a total of 800,000
shares. The concession was to expire Nov.
17, 1968, but the company was nationalized
July 26, 1956, by unilateral action of the
Egyptian government. As a result of hostil-
ities the canal was blocked between Nov.,
1956, and March, 1957. In July, 1958, an
agreement was finally signed in Geneva
between the United Arab Republic and
the shareholders of the former Suez Canal
Company. Compensation was arranged for
the period of twelve years which was still
to have elapsed between 1956 and the end
of the Company's 99-year concession in
1968. In the last few years, Nasser has been
seizing or delaying cargoes coming from
or going to Israel on the grounds that the
U.A.R. still considers itself in a state of
war with Israel.

Estonia

Area: 17,375 square miles.

Population (est. 1959): 1,196,000 (1940:
Estonians, 88%; Russians, 9%; Germans
[Balts], 1%; others, 2%).

Density per square mile: 63.2.

Principal cities (est. 1959): Tallinn, 280,-
000 (capital); Tartu, 74,000 (university
town).

Language: Estonian (Finno-Ugrian).

Religions: Lutheran, 78%; Greek Ortho-
dox, 19%; others, 3%.

HISTORY AND GOVERNMENT. Born out
of World War I, this small Baltic state
enjoyed two short decades of independence
before it was absorbed again by its power-
ful neighbor, Russia. In the thirteenth
century, the Estonians had been conquered
by the Teutonic Knights of Germany, who
reduced them to serfdom. In 1521, the
Swedes took over, and the power of the
German (Balt) landowning class was
curbed somewhat. But after 1721, when
Russia succeeded Sweden as the ruling
power, the Estonians were subjected to
a double bondage—the Balts and the tsar-
ist officials. The oppression lasted until
the closing months of World War I, when
Estonia finally achieved independence.

Shortly after the start of World War II,
the nation was occupied by Russian troops
and was incorporated as the sixteenth re-
public of the U.S.S.R. in 1940. Germany
occupied the nation from 1941 to 1944,
when it was retaken by the Russians.
Most of the nations of the world, includ-
ing the United States and Great Britain,
have not recognized the Soviet incorpora-
tion of Estonia.

Ethiopia (Kingdom)

(Abyssinia)

Area: 457,142 square miles.

Population (est. 1958): 21,600,000 (Abyssinian [Amhara], 20%; Galla, 50%; others, 30%).

Density per square mile: 35.0.

Ruler: Emperor Haile Selassie I.

Prime Minister: (Post vacant.)

Principal cities (est. 1956): Addis Ababa, 400,000 (capital); Asmara, 123,083 (capital, Eritrea); Dessié, 50,000 (grain center); Harar, 40,000 (coffee); Diré Dawa, 30,000 (railway workshops).

Monetary unit: Ethiopian paper dollar.

Languages: Amharic, Arabic.

Religions: Copt (Christian), Moslem.

STATUS IN THE WORLD TODAY

Isolated for many centuries from the rest of the world by a belt of mountains, Ethiopia is struggling to modernize itself and to catch up with the twentieth century economically. Pro-Western in its foreign policy, it is receiving technical and monetary assistance from many sources: the World Bank, the United Nations, the United States Point Four program, and Belgian, Swiss, French, and even Russian advisers. Despite active propaganda by a relatively large Soviet diplomatic delegation in Addis Ababa, American military communications installations have been erected in the country.

Before World War II, Ethiopia's principal link with the outside world was the railroad to Djibouti in French Somaliland. Since 1952, the former Italian colony of Eritrea has been federated with Ethiopia, giving it another outlet to the sea through the port of Massaua. Trade has increased and exploration for mineral resources has been speeded up.

HISTORY AND GOVERNMENT. The ancient empire of Ethiopia attained its independence long before the creation of any of the modern states of Africa. Present-day Ethiopia became a sovereign state as an outgrowth of the consolidation of a number of former kingdoms which owed allegiance to the Ethiopian emperor, the King of Kings. Most of these old kingdoms (Shoa, Tigr, Gojjam, and others) are today provinces of Ethiopia.

The Ethiopian kingdom is one of the few African countries which have a recorded history. Men have migrated here from Asia Minor for well over two thousand years. The chief race today is the Amhara, numbering 2,000,000. They were converted to Christianity by the Egyptian Coptic Christians. Along with the Amharic people, there have come to Ethiopia over the centuries Greeks, Jews, Arabs, and Indians, so that today the kingdom is a mixture of peoples

speaking over seventy different languages.

The fact that the ruling Amharic group have had to retain control over the country in the face of frequent tribal resistance accounts in part for some of the authoritarian aspects of Ethiopian government today. The kingdom remains essentially feudal in nature. At the top is the Emperor, Haile Selassie I (born 1891, crowned Emperor 1930), who traces his ancestry to the Queen of Sheba and to Menelek, King Solomon's first son. He retains virtually full governmental powers in his own hands, appointing the ministers who assist him and the governors who rule the outlying provinces.

In October, 1935, anxious to expand its small colonial empire, Mussolini invaded Ethiopia. Addis Ababa fell on May 5, 1941. With Italian Somaliland and Eritrea, Ethiopia became part of Italian East Africa until British and Ethiopian troops reconquered the country in 1941.

ECONOMIC CONDITIONS. Ethiopia is generally fertile, predominantly agricultural and pastoral, with many regions yielding two crops a year. The chief crops are maize, wheat, barley, rye, cotton, sugarcane, millet, hemp, vegetables, coffee, and teff (the common bread grain). The country's inadequate transport system, however, makes crop growing largely a local industry.

The country grazes several million cattle and many goats and sheep. Horses and mules are bred extensively as pack animals and mounts. There is little manufacturing except for small native industry, although the Italians built some industrial plants during their five-year occupation.

Chief exports in 1958 were coffee (64%), hides and skins (11%), and oil-seeds (9%). Leading customers were the United States (25%), Aden (21%), and Italy (19%); leading suppliers, Italy (15%), India (14%), and the United States (13%). Major imports were cotton piece goods, machinery, sugar, and salt.

NATURAL FEATURES AND RESOURCES. Over its main plateau land, Ethiopia has several high mountains. The Blue Nile, Abbai, rises in the northwest and flows in a great semicircle east, south, and north west before entering Sudan. Its chief reservoir, Lake Tana, lies in the northwest part of the plateau.

Gold, produced from placer mines worked by natives in the south and west, is Ethiopia's main mineral. Platinum is also mined in fair commercial quantities. Other minerals are rock salt, cinnabar, copper, iron, mercury, mica, potash, and sulfur. Oil deposits are believed to exist, and oil drilling rights have been sold to the Sinclair Refining Company of the United States.

AREA—Status: Federated with Ethiopia; 45,946 sq. mi.
 Population (est. 1957): 1,040,404.
 Capital: Asmara (population: 123,083).
 Foreign: Haile Selassie I.
 Executive: Fitaurari Asfaha Wolde-

Cultural products: coffee, barley, tobacco, sesame, hides, skins.
Minerals: gold, salt, potassium salts.
Product: pearls.

First Italian inroad into Eritrea in 1870, when the port of Assab and adjacent territory were bought from a native Sultan; with British approval, Italian troops occupied Massaua in 1885. By a decree of Jan. 1, 1890, Italian possessions along the Red Sea were united into the colony of Eritrea.

An autonomous, self-governing area, Eritrea has its own elected assembly which elects the chief executive. It is also represented in the Ethiopian Parliament. Powers reserved to the Ethiopian government include defense, foreign affairs, customs, trade, finance, communications.

The principal native elements are the Tigrins and Tigrés, who have close ethnological, and religious ties with peoples of neighboring Ethiopia. Irrigation is practiced in the coastal plains, and agriculture is practiced largely on the inland plateau (average elevation: 6,500 ft.).

Finland (Republic)

(Suomen Tasavalta)

Area: 130,119 square miles.
 Population (est. 1959): 4,414,000 (Finnish 90%; Swedish, 10%).
 Density per square mile: 33.9.
 President: Urho Kekkonen.
 Prime Minister: Veino J. Sukselainen.
 Principal cities (est. Jan. 1, 1957): Helsinki, 28,000 (capital); Tampere, 115,700 (textile, paper); Turku (Åbo), 114,400 (textile, shipbuilding); Lahti, 60,500 (lumber); Oulu, 49,300 (seaport, shipbuilding).
 Monetary unit: Markka (FM).
 Languages: Finnish, Swedish.
 Religions (1949): Evangelical Lutheran, 70%; Greek Orthodox, 2%; others, 2.6%.

STATUS IN THE WORLD TODAY

Finland's foreign policy since the end of World War II has had to take into account two fundamentally conflicting facts: the fact that public opinion in this country is oriented toward the free world and especially toward friendship with the United States; and the harsh economic reality that it is a neighbor of the U.S.S.R. and must trade with the Russians as a matter of economic necessity. Despite tricky propaganda campaigns

and economic pressure, the Communists have not succeeded in electing enough representatives in the government to give the Kremlin any sort of voice in domestic affairs. It has, however, been successful in obtaining trade pacts and a treaty of friendship and mutual assistance.

Despite the loss of its principal industrial area to Soviet Russia, Finland has managed to expand industry, to balance its budget, and to keep its currency stable. It occupies a special place of esteem in the United States because it was the only nation after World War I which continued to make semi-annual payments on its debts when larger countries were defaulting on their war obligations.

HISTORY AND GOVERNMENT. At the end of the seventh century the Finns, probably of Mongolian origin, came to Finland from their Volga settlements. Their repeated raids on the Scandinavian coast impelled Eric IX, the Swedish king, to conquer the country in 1157 and bring it into contact with Western Christendom. By 1809 the whole of Finland was conquered by Alexander I of Russia, who set up Finland as a Grand Duchy.

The first period of Russification (1899-1905) resulted in a lessening of the powers of the Finnish Diet. The Russian language was made official, and the Finnish military system was superseded by the Russian. The pace of Russification was intensified from 1908 to 1914. When Russian control was weakened as a consequence of the March Revolution of 1917, the Finnish Diet on July 20, 1917, proclaimed Finland's independence, which became complete on December 6, 1917.

When its territorial demands on Finland were rejected, the Soviet Union attacked Finland on November 30, 1939. The Finns made an amazing stand of three months. Finland finally capitulated, ceding 16,000 square miles to the U.S.S.R. Under German pressure the Finns joined the Nazis against Russia in 1941, but were defeated again, and ceded the Petsamo area to Soviet Russia.

The President of the Republic of Finland, chosen for six years by the Electoral College of 300 members, appoints the Cabinet. The single-chambered Diet, the *Eduskunta*, consists of 200 members popularly elected for three-year terms by proportional representation.

ECONOMIC CONDITIONS. The chief crops are oats, barley, rye, and potatoes. Grazing lands are extensive. In 1958, there were 1,936,000 cattle, 407,000 sheep, 534,000 hogs, and 170,293 reindeer.

The leading Finnish manufactures are wood and paper (about one-third the total

value), food, luxury items, machinery and textiles. With the cession of the Karelian isthmus and the city of Viipuri to the U.S.S.R., Finland lost valuable manufacturing areas. Helsinki is the principal industrial center.

Chief exports in 1958 were wood and wood products (30%), paper (28%), and wood pulp (20%). Leading customers were Britain (22%), U.S.S.R. (17%), West Germany (11%), and the U.S. (6%); leading suppliers, U.S.S.R. (18%), Britain (13%), West Germany (17%), and the U.S. (6%).

NATURAL FEATURES AND RESOURCES. Finland stretches 700 miles from the Gulf of Finland on the south to Soviet Petsamo, north of the Arctic Circle. Off the southwest coast are the Åland Islands (approximately 300), controlling the entrance

to the Gulf of Bothnia. Finland has more than 80,000 lakes. Of the few rivers, on the Oulu (Uleå) is navigable to any important extent.

Finland has no coal or oil, and many of its ore deposits are remote from transportation. Finland's sulfide ore is 4 per cent copper, 26 per cent sulfur and per cent iron, with some zinc, cobalt, gold and silver. Limestone, soapstone and granite deposits are extensive, and uranium deposits are believed to exist. Wood and peat are the only natural fuels.

More than a third of Finland is covered with high-quality timber, the nation's richest natural resource.

The Swedish-populated Åland islands (581 sq. mi.) have an autonomous status under a law passed in 1951.

THE FRENCH COMMUNITY

France (Republic)

(République Française)

Area: 212,736 square miles.

Population (est. 1959): 44,970,000 (1954: French, 96.6%; others, 3.4%).

Density per square mile: 211.4.

President: Charles de Gaulle.

Premier: Michel Debré.

Principal cities (census 1954): Paris, 2,850,189 (capital); Marseilles, 661,492 (chief port); Lyons, 471,270 (silk, metal manufacture); Toulouse, 268,863 (tobacco; commercial center); Bordeaux, 257,946 (wine; seaport); Nice, 244,360 (resort center); Nantes, 222,790 (manufacturing).

Monetary unit: Franc.

Religion (est.): Roman Catholic, 97.5%; Protestant and others, 2.5%.

STATUS IN THE WORLD TODAY

Under the energetic leadership of Gen. Charles de Gaulle, the newly established Fifth Republic of France appears to be making progress in restoring financial and political stability to that nation and making her a more effective partner in the association of free nations. After having lost the cream of their youth in two World Wars, the French, to whom the free world owes much of its way of life, are in no mood to accept the status of a second-class power. Under the leadership of de Gaulle they hope to recover that prestige that marked them as one of the great powers of the world.

The deepening French problem until May, 1958—political chaos, financial instability, and labor strife—caused great concern among the nations of the free world. France is indispensable to the Allies' position in Western Europe. Many

constructive enterprises set into motion by the West were blocked by the continuing French crises. No single group could ever attain enough power to implement a consistent long-term policy. The inauguration of the Fifth Republic changed all that. From a parliamentary democracy France became a presidential one with strong executive and balanced powers. The Premier is now, in effect, the President's chief executive and is largely responsible to the President instead of an unwieldy coalition of deputies in Parliament.

Creation of a strong executive has not in itself, solved all of France's problems. A number of fiscal reforms have been initiated, but the problem of the drain on the French economy by the war in Algeria remains. There is still some labor unrest because of the high prices resulting from inflation. But the aircraft and metallurgical industries have given exports a boost, and the franc has been stabilized and revalued—one "new" franc equals 100 former francs. France is also a member of the European Common Market, the Coal and Steel Community and the European Atomic Energy Community.

The French desire to be considered a first-rate power has not been without effects on military matters within NATO. Since the United States retains control over the atomic warheads of weapons sent abroad, it has had to move some of its planes to Britain and West Germany to cause the de Gaulle regime felt it was not compatible with French sovereignty not to have a voice in atomic matters. The too, partly in view of the war in Algeria, the units of the French fleet in the Mediterranean have been withdrawn from over-

The French Community

Constitution of the Fifth Republic of France, which was adopted by a referendum people on September 28, 1958, set up a Community which consisted of the French Republic and certain other States—formerly Overseas Territories of France—that voted to accept the present Constitution and later chose the status of self-governing Republics. At the present time there are twelve such Republics. Although we listed them below as part of the French Community, the relation to France of the Republics marked with an asterisk, had not been resolved at the time we went to press.

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TO command. Gen. de Gaulle, before his rise to power, criticized both American leadership of NATO and what he asserted was the French government's slavish acceptance of it. But despite the present differences, which are relatively minor, the French feel that finally a stronger France is needed to mean a stronger NATO.

In September, 1959, Gen. de Gaulle announced that four years after the end of hostilities in Algeria, an election would be held to determine the area's future.

FRANCE AND GOVERNMENT. France, as Gaul of ancient times, began its history as a separate nation, with the Treaty of Verdun (843), by which the Frankish territories roughly comprising what are now France, Germany, and Italy were

divided among Charlemagne's three grandsons. Caesar conquered part of Gaul in 57-52 B.C. and the Franks overran it in the fifth century A.D. The first of the Capetians, Hugh Capet (987-996) ruled over the principality of the Île-de-France, from which the Capetian domain was gradually expanded by conquest, purchase, marriage, inheritance, and forfeiture. The task of breaking English power in France was begun by Philip II Augustus (1180-1223) and continued in a long series of conflicts called the Hundred Years' War, 1338-1453. Beginning as a feudal conflict between French kings and the English Angevin house, this strife ended as a national war, with France emerging as a modern centralized national state. The English had won at Crécy in 1346 and at Agincourt in 1415 but were defeated at Orléans in 1429 by the French under Joan of Arc.

Relics of half-overthrown medievalism still survived in eighteenth-century France. Louis XVI (1774-1792) was unable to solve the accumulated crises. The Old Regime, with its autocratic monarch and its privileged nobility, was an outworn society ready to collapse under the impact of revolution. The French Revolution, beginning in 1789, resulted from lack of intelligent government, lack of political liberty, an arbitrary system of taxation, survival of medieval abuses, economic evils, and the ideas of the intellectual reformers of the Age of Reason. It was a dramatic, bloody affair which kept France in turmoil for years.

Napoleon Bonaparte gave France a short period of glory and then the humiliation of a stunning defeat. Napoleon hardened the changes that had been brought about by the French Revolution and made some of them permanent before the forces of reaction set in; he spread revolutionary reforms to conquered German and Italian territories, nourished the growth of nationalism, and consolidated the Industrial Revolution in France.

The Congress of Vienna (1815), called to remake the map of Europe on the basis of "legitimacy" and "compensations" after the downfall of Napoleon, restored the Bourbons to the throne. Louis Philippe abdicated and fled to England at the start of the Revolution of 1848, and the Second French Republic was established.

Taking advantage of a factional split, Prince Louis Napoleon assumed control of France in the coup d'état of 1851. A year later, on December 2, 1852, he proclaimed himself Napoleon III, Emperor of the French. He founded his Second French Empire on nationalism, militarism, and imperialism. His opposition to the national unification of Germany collided head-on with Bismarck's plans. The result was the Franco-Prussian War (1870-71). Napoleon III was captured at Sedan, and the Second Empire collapsed in ruins.

Reconstruction after the Franco-Prussian War was rapid, with reorganization of the army and economic and social reforms, and a new France emerged from World War I as the dominant power on the Continent. But four years of hostile occupation and the fires of war had reduced the once-thriving area of Northeast France to ruins. The Third French Republic was plagued by political instability and economic chaos.

From 1919 on, the aim of French foreign policy was to maintain German weakness by a system of military alliances isolating Germany. The rise of Hitler and the establishment of the Nazi dictatorship meant the failure of France's foreign policy. On June 5, 1940, the mechanized Nazi troops

attacked the French. As the German armies drew close to Paris, Italy declared war on France and England. The Germans marched into undefended Paris, and three days later Marshal Pétain, head of the French government then at Bordeaux, asked for an armistice. It was granted on June 22, 1940, and the French armies surrendered. Flooded with Nazi agents, France was betrayed as well as defeated. France was split into occupied and unoccupied zones. The unoccupied portion, Vichy France, became a totalitarian state with Marshal Pétain as Chief of State.

France was liberated by the Allied armies in September, 1944. The French Committee of National Liberation, formed in Algiers in 1943, established a provisional government with General de Gaulle as President of Council. With the adoption of a new constitution on December 1, 1946, the Fourth French Republic came into existence.

The Fifth Republic was inaugurated on October 5, 1958, after approval by a popular referendum on September 28, 1958. The President of the Republic is elected for 7 years by an enlarged electoral college made up of members of Parliament, departmental and municipal council representatives of the assemblies of Overseas Territories, and additional electors chosen by the mayors and municipal councilors. The President appoints the Premier and the Cabinet is responsible to Parliament. The President has the right to dissolve the National Assembly or to refer the Parliament for reconsideration of a law. The Parliament consists of two Houses: the National Assembly and the Senate. The 546 members of the National Assembly of the Fifth Republic were elected in November, 1958, by direct suffrage. The Senate was elected by indirect suffrage in April and May, 1959, and includes representatives from Metropolitan France and from Overseas Departments and Territories.

Religion. The predominant faith is Roman Catholicism, but church and state were separated in 1905. Diplomatic relations with the Vatican were resumed in 1921, and lesser church property was returned to diocesan associations in 1924.

Population. The people are not homogeneous, varying from section to section. During the inter-bellum period, the population remained almost static, with an increase of only 72,133 from 1931 to 1936 and a decrease of 3.3 per cent from 1936 to 1946. The period between 1946 and 1958 showed an increase of 5.6 per cent. France normally is almost self-sufficient in basic foodstuffs and leads the world in wine production.

ECONOMIC CONDITIONS. Silk culture once thrived in the lower Rhône valley but production fell sharply between world

butter, and cheese are important exports. Livestock in Oct., 1958, included 1,000,000 cattle, 8,573,000 sheep, and 8,000,000 hogs.

Industry. Principal industrial areas are in the Paris Basin, the Normandy, the Ardennes, Lower Seine and Lyon; the textile industry is concentrated in the north. Leading manufactures are iron, steel, chemicals, textiles, automobiles, machinery, and beet sugar.

Principal suppliers in 1958 were the United States (11%), Canada (11%), ECU Countries (11%), Algeria (7%), Belgium (5%), and Luxembourg (4%); **leading customers**, ECU Countries (38%), Algeria (13%), West Germany (10%), Belgium (8%), Switzerland (7%), and Britain (5%). **Leading exports** were metals and manufactures, machinery, and agricultural and food products.

PHYSICAL FEATURES AND RESOURCES.

France is second in size to Russia among European nations. In the Alps near the Italian and Swiss borders is France's highest point—Mont Blanc, 15,781 feet. The Massif Central and the Vosges Mountains are in the east and the Pyrenees are along the Spanish border. Except for extreme northwestern France, which is part of the Flanders plain, the country may be described as a series of river basins and a plateau. Three of the great rivers flow west—the Seine into the English Channel, the Loire into the Atlantic, and the Garonne into the Bay of Biscay. The Rhône flows south into the Mediterranean. For about a hundred miles, the Alps form France's eastern border. West of the Alps is the Massif Central, and to the east of the Rhône and northeast of the Garonne is the Central Plateau, covering about 25 per cent of France's area, and rising to a maximum elevation of 6,188 feet. In the south, the Mediterranean, about 115 miles east-southeast of Nice, is Corsica, the island of Napoleon's birth, with an area of 3,367 square miles.

Mineral Resources. French coalfields, most extensive in the northeast, ordinarily supply about 70 per cent of domestic needs. Lorraine and Normandy have valuable iron deposits. Provence has bauxite. Alsace has potash and oil. Limousin has zinc, lead and tar.

Forestry and Fisheries. France produces forest products, including resin, turpentine, cork, and nuts. The annual fish catch is the largest in Europe.

Principal cities (census 1954): Algiers, 355,040 (capital); Oran, 291,812 (seaport); Constantine, 143,334 (trading center); Bône, 112,010 (seaport, phosphates).

Monetary unit: French franc.

Languages: Arabic, French.

Religions: Moslem (natives), Roman Catholic, Jewish.

STATUS IN THE WORLD TODAY

The fight by Algerian nationalists for independence has had widespread political, diplomatic, military, and financial repercussions in France. Politically, it brought General de Gaulle to power when the Army and extremist French colonists virtually seceded, set up a "Committee of Public Safety," and demanded that de Gaulle be given power. Diplomatically, it has had serious effects on French relations with the other Moslem nations along the northern coast of the Mediterranean, with the French trying to stop the flow of arms from Arab sympathizers in these states. Militarily, it has forced France to detach troops from their NATO forces and send them to Algeria and tied down nearly half a million troops. Financially, the campaign has cost a great deal.

Although Algeria is considered part of metropolitan France, the natives, comprising 86 per cent of the population, never had all the same rights as Frenchmen, and when Morocco and Tunisia became independent, nationalists demanded the same status. When it was refused, fighting started, mostly of the guerrilla type. A number of moves to give the natives more political representation failed to satisfy the extremists. In 1947 Moslems were given the right to send deputies to the National Assembly in Paris. This was followed in 1958 by a bill establishing regional autonomy along geographic and ethnic lines with voting equality between Moslems and non-Moslems. The fighting continues, with nationalists demanding complete independence and the French colonists equally violently opposed to too many concessions to the Moslems. In January, 1960, riots broke out and barricades were established by French settlers who disapproved of Gen. de Gaulle's policy of self-determination, but the president's firm stand ended the rebellion as the Army started to move into Algiers.

HISTORY AND GOVERNMENT. As ancient Numidia, Algeria became a Roman colony at the close of the Punic Wars (145 B.C.). Conquered by the Vandals about A.D. 440, it descended from a high state of prosperity and civilization to virtual barbarism, from which it partially recovered after invasion by the Moslems about A.D. 650. In 1492 the Moors and Jews, who had been expelled from Spain, settled in Algeria.

AFRICA

Algeria (Part of Metropolitan France)

(L'Algérie)

Governor General: Paul Delouvrier.
Population: 10,265,000.

Falling under Turkish control in 1518, Algiers became for three centuries the headquarters of the Barbary pirates who preyed on Mediterranean commerce. The French took Algiers in 1830. While Algeria is organically linked with France, its constitutional status is in a process of revision. In the meantime, the French Delegate General has full civil and military powers and is directly responsible to the French Premier.

ECONOMIC CONDITIONS. Approximately 86 per cent of the population is native, 12 per cent French, and 2 per cent other European. The native population is Berber, with Arab admixture physically assimilated.

The area under cultivation is about 15,000,000 acres, more than 30 per cent of which is owned by European farmers, chiefly in the fertile coastlands. The principal crops are wheat, barley and oats. Algeria is a leading wine producer, with almost 7 per cent of the cultivated area devoted to vines. Tobacco, corn, vegetables, flax, silk, figs, and dates are also produced. Much of the area is more adapted to grazing than to agriculture. In 1954 there were 6,008,000 sheep, 893,000 cattle; (1953) 3,231,000 goats and 183,000 camels.

European industries include those dependent on crops, such as distilling and oil and flour milling, as well as the making of leather, tobacco and matches. There are also small native industries, particularly the traditional carpet weaving.

The chief exports were wine, iron ore, and citrus fruits; chief imports, petroleum and products, machinery and apparatus, and motor vehicles. France took 76 per cent of the exports and supplied 80 per cent of the imports.

NATURAL FEATURES AND RESOURCES. Low plains cover small areas near the coast, but 68 per cent of Algeria is a plateau between 2,625 and 5,250 feet above sea level. The region between the Sahara and the Mediterranean reaches a high point of 7,641 feet.

Algeria is a leading producer of phosphates. Iron ore (55 per cent metal) is found near the Tunisian frontier and on the Oran coast. Zinc, lead, and salt are also important minerals; and small amounts of oil and coal are produced.

The Central African Republic (Member of French Community)

Area: 238,000 square miles.

Population: 1,130,000.

Density per square mile: 4.7.

Chief of State: David Dacko.

Principal cities: Bangui, 77,000 (capital); Berberati, Bambari.

Monetary unit: franc C.F.A.*

Ethnic groups: Bayas, Mandjas, Bad Saras.

Languages: French and African languages.

Religions: Animism; some Christian.

HISTORY AND PRESENT STATUS

The Central African Republic, formerly known as Ubangi-Shari, was organized by France as a territory in 1894. It achieved its independence on August 13, 1960. Legislative powers are exercised by a 50-member Assembly elected for a five-year term. The President is elected by the Assembly.

ECONOMIC CONDITIONS. Coffee, cotton, sesame, diamonds and lumber are the leading products. Foreign trade (1958) came to \$20.6 million in imports and \$14.8 million in exports, with cotton, coffee, diamonds and lumber in the lead.

Chad, The Republic of

(Member of French Community)

Area: 501,000 square miles.

Population: 2,730,000.

Density per square mile: 5.4.

Chief of State: François Tombalbaye.

Principal cities: Fort-Lamy, 44,000 (capital); Fort-Archambault, Moundou, Abéché.

Monetary unit: franc C.F.A.*

Ethnic groups: Arabs, Saras, Peuls.

Languages: French, Arabic, and African languages.

Religions: Moslem, Animist, Christian.

HISTORY AND PRESENT STATUS

Primarily a desert, except in the south, Chad was visited by French expeditions toward the end of the 19th century. It became part of the Ubangi-Shari-Chad colony in 1910. Ten years later it was constituted a separate colony, became an autonomous republic within the French Union after World War II and attained independence on August 11, 1960. A 50-member Legislative Assembly, elected for five years, designates the Premier by simple majority and invests the cabinet with a two-thirds majority vote.

ECONOMIC CONDITIONS. Cotton, peanut and livestock are the chief products, with cotton accounting for \$8.4 million out of \$26 million in exports (1958). Imports amounted to \$34 million.

COMORO ISLANDS—Status: Overseas Territory.

Population: 180,000.

Capital: Dzaoudzi.

Administrator: Georges Arnaud.

The Comoro Is. (832 sq. mi.) became an autonomous overseas territory effective

* One franc C.F.A. (Communauté Française de l'Atlantique) equals 0.02 new French francs.

, 1947. They are located in the Indian about 300 miles north of Madagas- The population is largely Moslem. ts include essential oils, sisal, vanilla, cacao, and cloves.

Congo, The Republic of the (Brazzaville)*

(Member of French Community)

Area: 139,000 square miles.

Population: 760,000.

Density per square mile: 5.5.

Chief of State: Abbé Fulbert Youlou.

Principal cities: Brazzaville, 99,000 (cap-
Pointe-Noire.

Currency unit: franc C.F.A.†

Ethnic groups: Bavilis, Balalis, Batékés, this.

Languages: French and African lan-
s.

Religions: Animism, some Christian

(distinguished from The Republic of the Congo
ville), former Belgian colony.

HISTORY AND PRESENT STATUS

Formerly known as the Middle Congo, the area was placed under the protection of France during 1879-1882 by Pierre Sav-
an de Brazza, founder of Brazzaville. After World War II the colony declared its independence of Vichy, and Brazza-
ville served as the center of Gen. de Gaulle's Free French forces in Africa. It subsequently became an autonomous re-
public under the French Community and on August 15, 1960 achieved its indepen-
dence. Executive powers are exercised by the Premier designated by a 61-member
assembly, which is elected for a 5-year

ECONOMIC CONDITIONS. The chief agri-
cultural products are cocoa, coffee, to-
bacco, okoume and limba woods are im-
portant forest products; and oil, lead and
cassiterite (tin) are the principal minerals.
In 1958 imports came to \$44 million
and exports to \$15.6 million in exports,
including lumber, palm oil, peanuts, lead ore
and tobacco.

Dahomey, The Republic of

Area: 44,290 square miles.

Population: 1,719,000.

Density per square mile: 38.8.

Chief of State: Hubert Maga.

Principal cities: Porto Novo, 30,500 (cap-
Cotonou.

Currency unit: franc C.F.A.†

Ethnic groups: Fons and Adjias, Boribas,
as, Mahis.

Languages: French and African.

Religions: Animist, Christian, Moslem.

HISTORY AND PRESENT STATUS

Dahomey was a kingdom when, in 1851, King Gezo signed a commercial treaty with the French. Slavery expeditions led in 1892 to a war with the French, who had protectorates in the area. The following year the country's independence ended when it was organized as a territory by France. After World War II it became an auton-
omous republic within the French Union and on Aug. 1, 1960 was granted its inde-
pendence within the Community. Legisla-
tive powers are exercised by a 70-member
assembly elected for a five-year term. The
Premier is chosen by the Assembly.

ECONOMIC CONDITIONS. The chief prod-
ucts are palm oil, coffee, karite (vegetable
oil), cotton, kapok and phosphates. In
1958 imports amounted to \$17.2 million,
exports to \$13.6 million, chief among them
being palm kernels, palm oil and coffee.

**FRENCH SOMALILAND—Status: Over-
seas territory.**

Population: 67,000.

Capital: Djibouti (population 32,000).

Governor: René Petitbon.

Foreign trade (1957): domestic exports,
157,000 Djibouti fr.; ship stores, 2,727-
000,000 Djibouti fr.; imports (excluding
ship stores), 864,000,000 Djibouti fr. Chief
exports: salt, hides.

Mineral: salt.

French Somaliland, at the southern en-
trance to the Red Sea, was acquired by
France between 1883 and 1887 by treaties
with the Somali sultans, although posts on
the coast had been acquired in 1856. This
small, largely arid and sparsely populated
region is important chiefly because of the
port of Djibouti, the main artery of Ethi-
opia's trade via the Djibouti-Addis Ababa
railway. The area is administered by a
Governor, responsible to the French gov-
ernment and assisted by a representative
council. In October, 1958, French Somali-
land voted in favor of the new Constitu-
tion establishing the French Fifth Re-
public, and in December, 1958, the 32-
member Territorial Assembly of French
Somaliland voted to remain an Overseas
Territory within the French community.
In 1955 there were an estimated 3,132
Europeans, 28,000 Somalis, 25,000 Danakils,
and 6,000 Arabs.

The Gabon Republic

(Member of French Community)

Area: 102,290.

Population: 403,000.

franc C.F.A. (Communauté Française de l'Atlantique) equals 0.02 new French franc.

Density per square mile: 3.9.
 Chief of State: Léon M'Ba.
 Principal cities: Libreville, 20,000 (capital); Port-Gentil.
 Monetary unit: franc C.F.A.*
 Ethnic groups: Pahouins, Pongwés, Adouanas, Chirras, Punu and Lumbu.
 Languages: French and African languages.
 Religions: Animist, Christian along the coast.

HISTORY AND PRESENT STATUS

Gabon was first visited by the Portuguese navigator Diego Cam in the 15th century. In 1839 the French founded their first settlement on the left bank of the Gabon River and gradually occupied the hinterland during the second half of the 19th century. It was organized as a French territory in 1888, and became an autonomous republic within the French Union after World War II and an independent republic on Aug. 17, 1960. Legislative powers are exercised by a 40-member Assembly elected for a five-year term which names the Premier.

ECONOMIC CONDITIONS. Cocoa and akoume and acajou woods are the principal products besides the minerals, oil, gold, manganese and uranium. Foreign trade (1958) came to \$31 million in imports and \$33.6 million in exports, of which okoume accounted for \$10.4 million and petroleum for \$2.2 million.

by a Premier, named by a majority of the 100-member Assembly, which is elected for five years.

ECONOMIC CONDITIONS. The principal agricultural products are coffee, cocoa, bananas, and palm oil; acajou, tiam iroko and makere are the chief forest products. Diamonds and gold are also produced. Foreign trade (1958) came to \$81 million in imports and \$125.8 million exports, the latter consisting chiefly of coffee, cocoa and lumber.

The Malagasy Republic (Madagascar)

(Member of French Community)

Area: 227,800 square miles.
 Population: 5,071,000.
 Density per square mile: 22.3.
 Chief of State: Phillibert Tsiranana.
 Principal cities: Tananarive, 200,000 (capital); Tamatave; Diego-Suarez; Majunga; Fianarantsoa; Tulear.
 Monetary unit: franc C.F.A.*
 Ethnic groups: Merina (or Hova), Basimilakara, Retsileo, Tsimihety, Antaisakalava, Antandroy.
 Languages: French, Malgasy and others.
 Religions: Catholic, Protestant and others.

HISTORY AND PRESENT STATUS

The fourth largest island in the world, Madagascar remained independent under native rulers until 1885 when it came under French protection. French troops conquered the island in 1895, and it became a French colony the following year. The last native ruler, Queen Rànavàlona I, was exiled. Serious native nationalist outbreaks occurred in 1947.

In September, 1958 Madagascar voted in favor of the new Constitution of the Fifth French Republic, and in October, 1958 the French High Commissioner for Madagascar proclaimed as lapsed the laws under which Madagascar had been made a French Colony. An autonomous republic within the French Community since October, 1958, the Malagasy Republic became an independent member of that Community on June 25, 1960.

ECONOMIC CONDITIONS. Agricultural products include coffee, rice, cloves, tobacco, sugar, vanilla, manioc, banana, maize and coconuts. Gum, medicinal plants, rubber, tannins and dyewoods produced in the forests; graphite, mica, phosphates and gold are among its mineral resources. Foreign trade (1958) came to \$106.2 million in imports and \$81 million in exports.

Ivory Coast, The Republic of the

Area: 127,520 square miles.
 Population: 2,482,000.
 Density per square mile: 19.5.
 Chief of State: Félix Houphouët-Boigny.
 Principal cities: Abidjan, 127,000 (capital); Bouake.
 Monetary unit: franc C.F.A.*
 Ethnic groups: Agnis, Baoulés, Senoufos, Kroumen, Mandes, Dan-fouros, and others.
 Languages: French and African languages.
 Religions: Animist, Moslem, Christian.

HISTORY AND PRESENT STATUS

The Ivory Coast attracted both French and Portuguese merchants in the 15th century. French traders set up establishments early in the 19th century, and in 1842 the French obtained territorial concessions from local tribes, gradually extending their influence along the coast and inland. The area was organized as a territory in 1893, became an autonomous republic in the French Union after World War II and achieved independence on August 7, 1960. The government is headed

* One franc C.F.A. (Communauté Française de l'Atlantique) equals 0.02 new French francs.

exports, some of the leading items rice, coffee, sugar, peanuts, sisal, cloves and vanilla.

Mali, The Republic of

Area: 463,500 square miles.
Population: 3,700,000.
Density per square mile: 8.0.
Chief of State: Modibo Keita.
Principal cities: Bamako, 168,000 (capital).
Monetary unit: franc C.F.A.*
Ethnic groups: Bambara, Peuls, Markas, Fulas, Malinkes, Touareg and others.
Languages: French and African languages.
Religions: Moslem, Animist, Christian.

TERRITORY AND PRESENT STATUS

Acquired by France by the end of the 19th century, this area became a territory in 1904 and in 1946 became part of the French Union. On June 20, 1960 it became independent and, under the name of Sudanese Republic, was federated with the Republic of Senegal in the Mali Federation. However, Senegal seceded from the Federation and the Sudanese Republic changed its name to The Republic of Mali. Cotton, corn, sesame and cotton are its principal products.

Mauritania, The Islamic Republic of

Member of French Community

Area: 1,103,120 square miles.
Population: 623,800.
Density per square mile: 1.5.
Chief of State: Mokhtar Ould Daddah.
Principal cities: Nouakchott (capital, under construction).
Monetary unit: franc C.F.A.*
Ethnic groups: White Moors; a Negro population, chiefly Tukulers and Sorakolles.
Languages: French, Arabic and Negro languages.
Religion: Moslem.

TERRITORY AND PRESENT STATUS

Mauritania was first explored by the Portuguese in the 15th century, then by the Dutch in the 16th century, followed by the French, who developed the gum trade. The French came in the early 19th century and organized the area as a territory in 1904. It was scheduled to achieve independence on Nov. 28, 1960. A 40-member Assembly elected for a five-year term designates the Premier.

ECONOMIC CONDITIONS. Mauritania produces gum, palm oil and grains. Gum

arabic is a product of the forests and iron and copper are mined. Foreign trade statistics prior to independence were grouped with those of Senegal and Sudan.

Niger, The Republic of the

Area: 458,976 square miles.
Population: 2,400,000.
Density per square mile: 5.2.
Chief of State: Hamani Diori.
Principal cities: Niamey, 20,000 (capital); Zinder.
Monetary unit: franc C.F.A.*
Ethnic groups: Hausas, Djermas, Touareg, Peuls, and Songhais.
Languages: French and African languages.
Religion: Moslem and others.

The Niger was organized as a territory by France in 1920 and attained independence within the French Community on Aug. 3, 1960. The President of the Council (Premier) is elected by the Assembly, a 60-member legislative body elected for a five-year term.

ECONOMIC CONDITIONS. The chief products are peanuts, livestock, gum arabic, tin and wolfram. Foreign trade (1958) amounted to \$8.8 million in imports and \$15.2 million in exports, chiefly peanuts, livestock and hides.

RÉUNION (Bourbon)—Status: Overseas Department.

Population: 318,000.
Capital: St. Denis (population 26,310).
Prefect: Perreau Pradier.
Foreign trade (1958): exports, 6,500,000,-000 fr. C.F.A.* (90% to France); imports, 10,000,000,000 fr. C.F.A. (65% from France).
Chief exports: sugar, essential oils.
Agricultural products: sugar, vanilla, coffee, maize.

Discovered by Portuguese navigators in the 16th century, the island, then uninhabited, was taken as a French possession in 1638. It is located about 450 miles east of Madagascar, in the Indian Ocean. In September, 1958, Réunion approved the Constitution of the Fifth French Republic and became an Overseas Department within the new French Community.

There is no indigenous population. About three-quarters of the inhabitants are of European origin; the remainder are Creoles, mulattoes, Negroes, Indians and other Asiatics. Tropical cyclones of hurricane variety are frequent during the change of seasons. Occasionally a *raz de marée* (tidal wave) does great damage.

The Republic of Senegal

Area: 76,084 square miles.
Population: 2,260,000.

1 franc C.F.A. (Communauté Française de l'Atlantique) equals 0.02 new French francs.

Density per square mile: 29.7.
 President: Leopold S. Senghor.
 Premier: Mamadou Dia.
 Principal cities: Dakar, 230,000 (capital);
 Saint-Louis, Thiès.
 Monetary unit: franc C.F.A.*
 Ethnic groups: Wolofs, Sereres, Peuls,
 Tukulers, and others.
 Languages: French and African lan-
 guages.
 Religions: Moslem, Animist, Christian.

HISTORY AND PRESENT STATUS

The Portuguese had some stations on the banks of the Senegal River in the 15th century, and the first French settlement was made at Saint-Louis about 1650. The British took parts of Senegal at various times, but the French gained possession in 1840 and organized Sudan as a territory in 1904. In 1946, together with other parts of French West Africa, Senegal became part of the French Union. On June 20, 1960, it became an independent Republic federated with the Sudanese Republic in the Mali Federation, from which it withdrew soon after. Peanuts, cotton, gum arabic and phosphates are its chief exports.

Upper Volta, The Republic of the

Area: 106,011 square miles.
 Population: 3,472,000.
 Density per square mile: 32.8.
 Chief of State: Maurice Yameogo.
 Principal cities: Ouagadougou, 32,000 (capital); Bobo-Dioulasso.
 Monetary unit: franc C.F.A.*
 Ethnic groups: Mossis, Bobos.
 Languages: French and African lan-
 guages.
 Religions: Animist, Christian, Moslem.

HISTORY AND PRESENT STATUS

The Upper Volta consists chiefly of the lands of the Mossi Empire, where France established a protectorate over the Kingdom of Ouagadougou in 1897. Upper Volta became a separate colony in 1919, was partitioned among the Niger, Sudan and Ivory Coast in 1933, and was reconstituted in 1947. An autonomous republic within the French Community, it became independent on Aug. 5, 1960. It has a 75-member Assembly elected for five years, which selects the President of the Council.

ECONOMIC CONDITIONS. The principal products are cotton, sisal and peanuts. Imports (1958) came to \$7.2 million and exports to \$4.4 million, of which livestock and karite (vegetable oil) were the leading items.

WESTERN HEMISPHERE

FRENCH GUIANA (including ININI)
 Status: Overseas Department.
 Population: 30,000.
 Capital: Cayenne (population 13,362).
 Prefect: Pierre Maloy.
 Foreign trade (1957): exports, 324,000 fr. (44% to France); imports, 8,040,000,000 fr. (69% from France). Chief exports: rum (27%), timber, gold.
 Agricultural products: bananas, corn, manioc, rice, sugar cane.
 Mineral: gold (699 kg. produced in 1957).

French Guiana, lying north of Brazil and east of Surinam (Dutch Guiana) on the northeast coast of South America, was settled in 1626. Penal settlements, embracing the area around the mouth of the Maroni River and the Îles du Salut (including Devil's Island), were founded in 1852; they were replaced by refugee camps in the 1940's.

During World War II, French Guiana first adhered to the Vichy government, then the Free French took over in March, 1944. French Guiana accepted in September, 1958, the new Constitution of the French Fifth Republic and became an Overseas Department within the new French Community.

GAUDELLOUPE—Status: Overseas Department.

Population: 259,000.
 Capital: Basse-Terre (population 11,800).
 Prefect: Guy Malines.
 Foreign trade (1957): exports, 12,000,000 fr. (92% to France); imports, 1,000,000,000 fr. (75% from France). Chief exports: sugar (61%), bananas, rum.
 Agricultural products: sugar, bananas, coffee, cacao, manioc, vanilla.
 Manufactures: rum, sugar.

Guadeloupe, lying in the West Indies about 300 miles southeast of Puerto Rico, was discovered by Columbus in 1493. French colonization began in 1635. The largest city and chief port is Pointe-à-Pitre (population 30,465). About half the cultivated area is devoted to sugar cane. The manufacturing of rum and spirits is the principal industry. In September, 1958, Guadeloupe voted in favor of the new Constitution of the French Fifth Republic and became an Overseas Department within the new French Community.

MARTINIQUE—Status: Overseas Department.

Population: 267,000.
 Capital: Fort-de-France (population 380).
 Prefect: Gaston Villéger.
 Foreign trade (1958): exports, 13,000,000 fr. (96% to France); imports, 17,000,000 fr.

* One franc C.F.A. (Communauté Française de l'Atlantique) equals 0.02 new French francs.

fr. (77% from France). Chief exports: sugar (42%), bananas, rum. Cultural products: sugar, bananas, apples, cacao, coffee. Manufactures: rum, sugar.

Martinique, lying in the Lesser Antilles 300 miles northeast of Venezuela, probably discovered by Columbus in 1492 and was taken for France in 1635. During the Franco-German armistice of 1918 it had a semi-autonomous status under the High Commissioner, Admiral Robert, until 1943, when he re-established his authority to the Free French. The area, administered by a Prefecture, is represented in the French legislature. In October, 1958, Martinique voted in favor of the new Constitution of the French Republic and became an Overseas Department within the new French Community. The population is mainly Negro and mulatto. Most of the arable land is devoted to sugar cultivation. Fort-de-France, the capital and chief commercial port, has an excellent harbor.

PIERRE AND MIQUELON—Status: Overseas territory. Population: 5,000.

Capital: St. Pierre (population 4,295). Administrator: Pierre Sicaud. Foreign trade (1957): exports, 341,000,- C.F.P. (26.1% to France); imports, 1,000 fr. C.F.P. (51% from Canada). Chief exports: fish and products.

The sole remnant of the French colonial empire in North America, these islands were first occupied by the French in 1660. Their only importance arises from proximity to the Grand Banks, located 100 miles south of Newfoundland, making them the center of the French Atlantic cod fishery. In September, 1958, St. Pierre and Miquelon voted in favor of the new Constitution of the French Fifth Republic and became an Overseas Territory within the new French Community.

OCEANIA

FRENCH POLYNESIA—Status: Overseas territory.

Governor: Jean Toby. Capital: Papeete, on Tahiti (population 12,247). Foreign trade (1958): exports, 796,000,- C.F.P.* (52% to France); imports, 1,000 fr. C.F.P. (44% from France). Chief exports: phosphate (33%), copra,

Cultural products: copra (exports 10,000 metric tons), sugar, vanilla,

Capital: phosphates, copra, vanilla.

The term French Polynesia is applied to the scattered French possessions in the Pacific—Mangareva (Gambier),

Makatea, Marquesas Islands, Rapa, Rurutu, Rimatara, Society Islands, Tuamotu Archipelago, Tubuai, and Raivavae—which were organized into a single colony in 1903. The appointed Governor is assisted by a Privy Council and a popularly elected Representative Assembly. The principal and most populous island—Tahiti, in the Society group (pop. 1951: 30,500)—was claimed as French in 1768. In September, 1958, French Polynesia voted in favor of the new Constitution of the French Fifth Republic and became an Overseas Territory within the new French Community. The natives are mostly Polynesians.

NEW CALEDONIA AND DEPENDENCIES—Status: Overseas territory.

Population: 69,000.

Capital: Nouméa (population 22,238).

Governor: Aimé Grimaud (also French High Commissioner in the Pacific).

Foreign trade (1958): exports, 2,030,000,- 000 fr. C.F.P.* (62% to France); imports, 3,438,000,000 fr. C.F.P. (56% from France). Chief exports: nickel (87%), chromite, coffee.

Agricultural products: coffee, copra, corn, cotton, manioc, rice, tobacco.

Minerals: nickel, chromite, iron ore.

Sea product: mother-of-pearl.

New Caledonia (6,533 sq. mi.), lying about 1,070 miles northeast of Sydney, Australia, was discovered by Captain James Cook in 1774 and annexed by France in 1853. The government, in the hands of an appointed Governor and an elective Council, also administers the Isle of Pines, the Wallis Archipelago, the Loyalty Islands, the Chesterfield Islands, Walpole, the Huon Islands, Futuna and Alofi, with a total area of 1,121 square miles. The area—taken over in the summer of 1940 by the Free French after a bloodless revolution—is one of the richest of the Pacific islands in mineral resources, particularly nickel and chrome ore. New Caledonia chose in 1958 to remain an Overseas Territory within the new French Community. The natives are Melanesians; about one-third of the population is white and one-fifth Indo-Chinese and Javanese. A French penal colony was established in the 19th century.

NEW HEBRIDES—Status: Anglo-French condominium.

Population: 53,000.

Capital: Vila (population 2,000).

Foreign trade (1957): exports, £1,693,734; imports, £1,232,847. Chief exports: copra, cacao.

Agricultural products: coconuts, cacao, coffee.

Sea products: trochus and burghaus shell.

The New Hebrides, under joint Anglo-French administration since February, 1906, lie northeast of New Caledonia. The islands, about 40 in number, joined the Free

French movement after a plebiscite in July, 1940. Most of the natives are Melanesians of mixed blood; there were 659 British and 3,812 French in 1958. The larg-

est island is Espiritu Santo (875 sq. mi.). The French and British high commissioners in the Pacific are represented by resident commissioners.

GERMANY

HISTORY. In Caesar's time, the territory that is now Germany was inhabited by barbarous tribes that came originally perhaps from Central Asia. One of these Germanic tribes, the Franks, attained supremacy in western Europe under Charlemagne, who was crowned Holy Roman Emperor in A.D. 800. By the Treaty of Verdun (843), Charlemagne's lands east of the Rhine were ceded to the German Prince Louis. Additional territory acquired by the Treaty of Mersen (870) gave Germany approximately the area she maintained throughout the Middle Ages. For several centuries after Otto the Great was crowned King in 936, the German rulers were also usually heads of the Holy Roman Empire.

Relations between state and church were changed by the Reformation, which began with Martin Luther's 95 theses, and came to a head in 1547, when Charles V scattered the forces of the Protestant League at Mühlberg. Freedom of worship was obtained by the Peace of Augsburg (1555), but a Counter Reformation took place later, and a dispute over the succession to the Bohemian throne brought on the Thirty Years' War (1618-48) which devastated Germany and left the empire divided into hundreds of small principalities virtually independent of the Emperor. Meanwhile, Prussia was developing into a province of considerable strength. Frederick the Great (1740-86) reorganized the Prussian army and defeated Maria Theresa of Austria in a struggle over Silesia. The conflict with revolutionary France hastened the disintegration of the empire, and in 1806 Francis II of Austria laid down the Imperial German crown. After the defeat of Napoleon at Waterloo (1815), the struggle between Austria and Prussia for supremacy in Germany continued, reaching its climax in the defeat of Austria in the Seven Weeks' War (1866) and the formation of the Prussian-dominated North German Confederation (1867).

The architect of German unity was Otto von Bismarck (1815-1898), a conservative, monarchist, and militaristic Prussian Junker who had no use for "empty phrase-making and constitutions." From 1862 until his retirement in 1890 he dominated not only the German but also the entire European scene. He unified all Germany in a series of three wars against Denmark (1864), Austria (1866), and

France (1870-1871). Historians differ on the responsibility for these wars, but most believe they were instigated and promoted by Bismarck in his zeal to obtain national unity through "blood-and-iron."

On January 18, 1871, King William of Prussia was proclaimed William I, German Emperor, at the Hall of Mirrors at Versailles. The North German Confederation, created in 1867, was abolished, and the new Second German Reich, consisting of both North and South German states, was born. As King of Prussia, the German Emperor exercised what amounted to dictatorial control over all Germany. With a powerful army, an efficient bureaucracy, and a loyal bourgeoisie, Chancellor Bismarck consolidated a powerful central state under Prussian domination.

William II (1888-1918) dismissed Bismarck in 1890 and embarked upon a "New Course" stressing an intensified colonialism and a powerful navy. His foreign policy gradually culminated in diplomatic isolation of Germany and a nearly fatal outcome of World War I.

The Second German Empire collapsed following the defeat of the German army in 1918, the naval mutiny at Kiel, and flight of William II to Holland. The Social Democrats, led by Ebert and Scheidemann, crushed the Communists and established a moderate republic. The Weimar Constitution of 1919 provided for a President to be elected for seven years by direct universal suffrage; a bicameral legislature consisting of the *Reichsrat*, representing the states, and the *Reichstag*, representing the people. It contained a model Bill of Rights. Unfortunately, the value of the Constitution was weakened by including provision (Article 48) enabling the President to rule by decree.

The Weimar Republic was neither wanted, nor understood by the mass Germans. They regarded it as a child of defeat, imposed upon a Germany whose legitimate aspirations to world leadership had been thwarted by a world conspiracy. Schooled in autocracy, obedience, and leadership, the people apparently were not ready for an advanced democratic form of government. Added to this were a crippling currency debacle, a tremendous burden of reparations, and acute economic distress.

Capital of Germany's misery was made by Adolf Hitler (1889-1945), a former A

war veteran, a fanatical hypomaniac, a remarkable orator, and a passionate nationalist. He aroused all the elements of discontent by promising a Greater Germany, the abrogation of the Treaty of Versailles, the restoration of Germany's colonies, and the destruction of the Communists. When the Social Democrats and the Communists refused to combine against the Nazi threat, they sealed the doom of the Weimar Republic. President von Hindenburg appointed Hitler as Chancellor on January 30, 1933.

Hitler. With the death of President Hindenburg in 1934, Hitler became the master of Germany. He repudiated the Treaty of Versailles and began the rearmament. In 1935 he withdrew from the League of Nations, and he reoccupied the Rhineland and the anti-Comintern pact with Austria at the same time strengthening re- with Italy. Austria was annexed in 1938. By the Munich agreement (1938) he gained the Czech Sudetenland in violation of this agreement he effected the dismemberment of Czechoslovakia in March, 1939. But his invasion of Poland on Sept. 1, 1939, precipitated the war and French declarations of war.

On May 8, 1945, Germany surrendered unconditionally to Allied and Soviet military commanders, and on June 5 the four-Allied Control Council became the governing government of Germany.

The Berlin (or Potsdam) Conference (July-Aug. 2, 1945) President Truman, and Prime Minister Attlee set forth the principles by which the Allied Control Council was to be guided. They were: German complete disarmament and demilitarization; destruction of its war potential; control of industry; decentralization of political and economic structure. At the final determination of territorial boundaries at a peace conference, the three Allies agreed in principle to the ultimate division of the city of Königsberg (now Kaliningrad) and its adjacent area to the Soviet Union and to the administration by the Soviet Union of former German territories lying to the east of the Oder-Neisse line.

For purposes of control, Germany was divided in 1945 into four national occupation zones, each headed by a Military Government assisted by appropriate supervisory and rating staffs.

In order to unify Germany were totally unsuccessful, and the western powers were unable to agree with the U.S.S.R. on any fundamental issue. Work of the Allied Control Council was hamstrung by repeated Soviet vetoes; and finally, on March 1948, the U.S.S.R. walked out of the Council. Meanwhile, the U.S. and Britain began steps to merge their zones

economically (Bizone); and on May 31, 1948, the U.S., Britain, France and the Benelux countries agreed to set up a German state comprising the three western zones. At the same time the western powers introduced a new German currency.

The Soviet Union replied to these measures by clamping a blockade on all ground communications between the western zones and Berlin. The western Allies, refusing to be driven out of the capital, immediately organized a gigantic airlift to fly supplies into the beleaguered city. Before the Russians were finally forced to lift the blockade on May 12, 1949, 60,000 men were engaged in the airlift.

In return for lifting the blockade, the U.S.S.R. asked only that the Big Four Foreign Ministers meet again to discuss German unification. The conference, meeting in Paris from May 23 to June 20, 1949, ended as usual in a deadlock.

The Big Four Foreign Ministers met once more at Berlin from Jan. 25 to Feb. 18, 1954, again without success. No progress toward German reunification was made thereafter, despite a number of frequent high-level meetings, the last series being held in Geneva in the summer of 1959.

German Federal Republic (West Germany)

Area: 95,716 square miles.*

Population (est. 1959): 52,856,000 (predominantly German).

Density per square mile: 552.2.

President: Heinrich Lübke.

Chancellor: Konrad Adenauer.

Principal cities (est. 1958): Hamburg, 1,807,640 (chief port); Munich, 1,033,964 (Bavarian capital); Cologne, 760,236 (transportation center); Essen, 725,236 (steel center); Düsseldorf, 685,033 (river port); Frankfurt am Main, 647,236 (manufacturing); Bonn, 142,540 (capital).

Language: German.

Religions (census 1950): Protestant, 52.2%; Roman Catholic, 43.8%; others, 4.0%.

* Excluding West Berlin.

STATUS IN THE WORLD TODAY

West Germany has allied itself with the western free world in the cold war with communism, and both its leadership and its people are strongly oriented toward the United States and its foreign policy. On May 26, 1952, it was integrated into the North Atlantic Treaty Organization. Four years later the Bundestag legalized national armament, although clearly specifying that there would be civilian control over the military. Its maximum of twelve divisions will be under the command of

the Supreme Allied Commander, Europe, at NATO headquarters. The Germans fear the colossus to the East. They know well how their brothers in East Germany suffer under the Communist yoke and they want none of it. And it is Soviet Russia which unilaterally established the Oder-Neisse line as the definitive eastern boundary of postwar Germany, a decision which West Germany does not recognize.

Some opposition to the extent of the nation's pro-Western policy does exist, by reason of the natural desire of all Germans for reunification of their country. The Social Democrats insist that if West Germany were not allied militarily with the free world, there might be a chance to negotiate reunification with the Kremlin. This argument, however, seemed to have lost considerable force in July, 1959, when Prime Minister Khrushchev announced that the line between East Germany and West Germany was the dividing line between Communism and capitalism which Russia would defend to the bitter end. In addition, there are some industrialists who feel they could expand their exports to Iron Curtain countries were it not for the restrictions placed on trade in strategic materials by the United States. All parties are agreed, however, on the necessity of maintaining a free Berlin instead of turning it over to the Communists, as the Soviets argued in vain at a series of Foreign Ministers' conferences in Geneva in the summer of 1959.

West Germany's recovery after its defeat in World War II was little short of phenomenal. To some extent it was due to American aid of some \$3.4 billion, as well as hard work. The recovery is a classic case of the free-market economy operating successfully with a limited number of strategically placed controls. It stands in contrast to the economy of East Germany, which has sunk to a much lower level.

German industry has forged ahead by leaps and bounds. By 1953 she had achieved an industrial output 59 per cent higher than 1936. From 1951 to 1956 West German exports tripled in value. West Germany pushed ahead of Britain for the number one trading position in South America. Her chemical exports passed those of Britain for the first time.

The country's foreign policy was apparently assured of continuity when Chancellor Adenauer decided to continue in his job rather than run for President.

HISTORY AND GOVERNMENT. The Federal Republic of West Germany, comprising those portions of Germany and Greater Berlin which had been assigned to the American, British, and French zones

of control, was proclaimed on May 8, 1949, with its capital at Bonn.

The Constitution of the German Federal Republic embodies the best features of the French Declaration of the Rights of Man, the first ten amendments to the American Constitution, the British Bill of Rights, and the Weimar Constitution. It was adopted by the Parliamentary Council on May 8, 1949, and approved by High Commissioners on May 12, 1949. It provides for a Federal President, elected for a term of five years by a Federal Convention. The Parliament consists of two legislative houses. The upper house, the *Bundesrat*, represents and is appointed by the governments of the *Länder*, or states. The lower house, the *Bundestag*, is elected for a period of four years by universal suffrage. The Chancellor, or Prime Minister, is appointed by the President, though the *Bundestag* reserves the right to elect or dismiss the Chancellor of its own preference. Each of the ten constituent *Länder* is required to have a republican form of government with an assembly chosen by the people.

ECONOMIC CONDITIONS. *Agriculture.* Agriculture is characterized by mixed farming, the climate and the soil permitting cultivation of a variety of crops and most types of livestock. Rye and potatoes are staple crops in the north; grains and sugar beets in the central regions. The northwestern and southern areas are not so well suited for dairying, while the west is the chief fruit- and wine-producing region. The soil is generally poor, and high crop yields are dependent upon large-scale use of fertilizers.

In Dec., 1958, West Germany (excluding the Saar) had 11,948,000 cattle, 9,000 horses, 14,418,000 hogs, and 1,127,000 sheep.

West Germany is not self-sufficient in food. Difficulties stem to a considerable extent from the fact that Poland now controls the area east of the Oder-Neisse which contained 28 per cent of prewar Germany's arable land and produced about 20 per cent of its food.

Industry. West Germany's industry is well-developed and highly diversified. It accounted for about two-thirds of Germany's prewar industrial production and for a large part of iron and steel production.

Shipbuilding has regained its former prominence. Industrial production in 1958 was 140 per cent of the 1953 level.

West Germany is a member of the European Coal and Steel Community which commenced activities on Aug. 1, 1952. It has jurisdiction over the production and allocation of coal and steel in its member nations.

Leading customers in 1957 were countries (53%), the U.S. and Canada (17%), and Latin America (8%); lead-pipers, EPU countries (44%), the Canada (17%), and Latin America. Leading exports included machines vehicles (9%), electrical machinery apparatus (8%), iron and steel products (3%), and coal (3%); leading minerals (5%), copper (4%), iron ore (4%), and wheat (3%).

Shipping on the Rhine is controlled by the International Commission of the Rhine—a national body composed provisionally of British, French, Swiss, Dutch and German representatives—which was reconstituted in October, 1945.

PHYSICAL FEATURES AND RESOURCES.

The northern plain, the central hill country, and the southern mountain district constitute the main physical divisions of Germany. The Bavarian plateau in the southwest averages 1,600 feet above sea level, but it reaches 9,721 feet in the Black Forest, the highest point in Germany.

There are several important navigable rivers. The Danube, rising in the Black Forest, flows east across Bavaria and Austria. The other important rivers are the Rhine, which rises in the west and flows across the Netherlands into two channels to the North Sea, and the Elbe, which is navigable by smaller vessels as far as Hamburg. The Rhine and the Elbe, which flow into the North Sea, are navigable within Germany for ships of 400 tons. The Weser, flowing into the North Sea, and the Main and Mosel (Moselle), tributaries of the Rhine, are also im-

portant. *and Forests.* Aside from rich deposits of coal and potash, West Germany has no mineral wealth is not considerable. The Ruhr, Krefeld and Aachen districts are one of the world's greatest coal-producing regions.

Forests cover 23 per cent of the total area of Germany. The forest is covered by commercial timber which yield timber as well as maple, paper, wood fiber, cellulose and other products.

German Democratic Republic (East Germany)

11,380 square miles.*
Population (est. 1958): 16,255,000 (predominantly German).

Area per square mile: 392.8.

High Commissioner: G. M. Pushkin.

President: Otto Grotewohl.

Major cities (est. 1957): Leipzig, 598,000 (textile, publishing center); Dresden, 491,714 (railway center, Elbe port); Karl-Marxstadt (Chemnitz), 286,016 (textiles); Halle am der Saale, 280,614 (railway center); Magdeburg, 258,447 (iron and steel products).

Monetary unit: Ostmark.

Religions (census 1946): Protestant, 81.3%; Roman Catholic, 12.1%; others, 6.6%.

* Excluding East Berlin.

STATUS IN THE WORLD TODAY

East Germany is probably the Kremlin's most important satellite because it has placed Soviet military and political influence deep inside western Europe. As such it is a springboard for further Communist expansion and a first line of defense. The Western powers have refused to acknowledge its legal existence as a state or separate sovereign entity, regarding it as a disguised Soviet dependency which is directly administered by the occupying authority. Its boundaries coincide with the zone of occupation conferred upon the Soviet Union at the end of World War II. The Russians, on the other hand, declared it a "country" in October, 1949, and bestowed upon it "full sovereignty" in September, 1957. This has given the U.S.S.R. an excuse for refusing to negotiate the reunification of Germany, claiming that it is a matter between the "state" of East Germany and the West German Republic. It seeks constantly to bolster the prestige of the East German regime and tried, unsuccessfully, to obtain equal status for it as a participant with other powers at the Foreign Ministers' conferences in Geneva in 1959. The presence of Soviet occupation troops is regulated by a status-of-forces agreement as in Hungary and Rumania, and their stationing in East Germany is formally regarded as temporary. But their function in keeping the Communist regime in power was dramatically demonstrated in June, 1953, when they were used to quell a workers' riot in East Berlin.

Economically, East Germany is tied to the Soviet bloc and has made nowhere near the progress achieved by West Germany. Not until the spring of 1958 was food rationing abolished, but prices remain high and there is a scarcity of consumer items. A seven-year plan to coordinate the Soviet and East German economies calls for sizable expansion of the East German chemical industry and delivery of more chemical and machine industry products to Russia. In return, East Germany will receive greater supplies of raw materials, such as oil, pig iron, aluminum, copper, and steel. An economic program adopted in January, 1958, called for a 25% rise in industrial production in the next three years. Some progress has been made, and according to official figures, East Ger-

... is the second industrial power in the communist orbit, excluding Russia.

HISTORY AND GOVERNMENT. The so-called German Democratic Republic comprises the Soviet zone of occupation of eastern Germany. It was proclaimed on Oct. 7, 1949, with its seat at Berlin, on the basis of a Constitution adopted May 30, 1949, by a People's Congress chosen under a plebiscite arrangement in elections held in the Soviet zone and East Berlin on May 15 and 16, 1949. The Congress elected a People's Council (*Volksrat*) which was transformed on Oct. 7 into a provisional People's Chamber (*Volkskammer*). A Chamber of the States (*Länderkammer*) was nominated on Oct. 10, and on Oct. 11 both chambers elected Communist leader Wilhelm Pieck as President of the republic and Otto Grotewohl as Minister-President or Premier. The Constitution is Soviet in nature and the government is under complete Communist domination. Soviet government supervision is exercised by the Soviet High Commissioner.

The republic lies largely between the Elbe and Oder rivers, including most of Brandenburg, Mecklenburg and the industrial Saxon and Thuringian lands.

ECONOMIC CONDITIONS. About 22 per cent of the population is engaged in agricultural pursuits and the area is almost self-sufficient in foodstuffs. Postwar yields have, however, suffered from droughts and shortages of fertilizers.

Most of the industrial establishments, particularly in heavy industry, have been nationalized. The area accounted for 26 per cent of prewar Germany's industrial production, ranking first in textiles, paper and pulp and ceramics and glass (especially optical glass produced by the famous Jena works). A Two-Year Plan inaugurated in 1949 had the object of raising the volume of production to 81 per cent of the 1936 level by the end of 1950, while a Five-Year

Plan initiated in 1951 aimed at doubling the 1936 level by 1955. Official production data for 1958 are as follows: pig iron (1,775,900 metric tons), raw steel (3,000 tons), cement (3,552,000 tons).

Foreign trade is carried on through government-owned trading companies. It is confined largely to U.S.S.R., Czechoslovakia and Poland. Important imports include foodstuffs, minerals and timber. Exports include machinery, engineering equipment and chemicals.

NATURAL RESOURCES. The area is rich in minerals. It has only minor deposits of coal. It does have important deposits of lignite and crude potash.

Berlin

Area: 341.2 square miles.

Population (est. 1958): 3,336,000.

Berlin, the capital of prewar Germany, is surrounded by the German Democratic Republic. It is occupied by the forces of the U.S., the U.K., France and the U.S.S.R., each having its own sector of occupation. The three western sectors contain 25 per cent of the area and two-thirds of the population.

The supreme authority in West Berlin is a tripartite Kommandatura, which has responsibility for the exercise of the powers reserved to the occupation forces. Under the Berlin Charter, a document annexed to the former West German Occupation Statute. With the termination of the occupation of West Germany, the controls were substantially relaxed.

Other powers of government are exercised by a City Assembly elected by popular vote and a *Magistrat* (city council) chosen by the Assembly.

Supreme authority in the eastern sector of Berlin is exercised by the Soviet High Commissioner. Powers not exercised by the German Democratic Republic are vested in a "rump" city government proclaimed itself in power Nov. 30, 1949. Major anti-Communist riots broke out in East Berlin in June, 1953.

Greece (Kingdom) (Hellas)

Area: 51,182 square miles.

Population (est. 1958): 8,216,000 (1940, excluding the Dodecanese Greek, 92.8%; Turkish, 3.8%; Macedonian, 1.3%; Spanish, 1%; others, 1.1%).

Density per square mile: 159.7.

Sovereign: King Paul I.

Premier: Konstantinos Karamanlis.

Principal cities (census 1951, municipal areas only): Athens, 565,084 (capital); Salonika, 217,049 (seaport); Piraeus, 186,014 (port of Athens); Patras, 79,014 (seaport); Volos, 51,144 (seaport).

Monetary unit: Drachma.

Languages: Greek, Turkish.

Religions: Greek Orthodox, 96%
hammedan, 2%; Jewish, 1.1%; others

STATUS IN THE WORLD TODAY

Greece, which had to fight and come Communist guerrilla forces but could even begin to recover from effects of World War II, is a member of the North Atlantic Treaty Organization which it joined in 1951. It has long friendly ties with the United States.

many of its nationals have emigrated and with Great Britain. From 1955 to 1959, however, relations with these countries as well as with Turkey remained because of the question of a British colony. Greek Cypriots united union with Greece and under a campaign of terrorism and guerrilla

The Turks on the island were not opposed to any such union, but there was some feeling against the United States for not openly backing the Greek side. An agreement making Cyprus a republic, with constitutional safeguards for the Turkish minority, was reached in July of 1959, and peace was restored. Historically one of the poorest countries in Europe, Greece has made a remarkable postwar recovery, thanks in part to funds supplied by the United States under the Truman Doctrine for the rehabilitation of both Greece and Turkey. Industrial production has soared, and highways have been improved, and the national budget has been balanced. Destruction caused by the war, which was severe, has resulted in rebuilding more than 1,500 villages and towns and virtually all roads.

RELIGION AND GOVERNMENT. Greece, as recorded history going back to 776 B.C., reached the peak of its glory in the 5th century B.C., and by the middle of the 4th century B.C., it had declined to the status of a Roman province. It remained a part of the Eastern Roman Empire until Constantinople fell to the Crusaders in 1453, the Turks took Constantinople, and by 1460 Greece was a Turkish province. The insurrection made famous by Lord Byron broke out in 1821, and in 1827 Greece was set up as an independent nation, with sovereignty guaranteed by Britain, France and Russia. Prince Otto of Bavaria was recognized as King of Greece later, but he was ousted by a revolution in 1862. Prince William of Denmark, George I, succeeded him.

King George encouraged the adoption of a constitution which made possible the development of a democratic parliamentary government. Greek territory was considerably increased as a result of the Balkan Wars, and an expedition into Turkish Asia Minor during World War I was unsuccessful, and the Greek-inhabited areas were financed by an exchange of populations. A republic was proclaimed in 1924, following the departure of King George II and a revolution which showed a republican form of government. The monarchy was restored in 1935, following a coup d'état. Greece was invaded by an Italian invasion so successfully that Nazi Germany had to come to the aid of her Axis partner the following

year. British and Greek troops liberated Greece in October, 1944. For some time after that guerrilla warfare was conducted by Communist sympathizers.

Greece is a constitutional hereditary monarchy. Its unicameral Parliament is elected by popular vote. Nominal executive power is vested in the King.

ECONOMIC CONDITIONS About three-quarters of the population engages in agricultural pursuits, although only one-fifth of the land is arable. Most of the cultivated area is devoted to cereals: wheat, barley, and maize. There are also olive trees, vines, tobacco, and currants. The principal fruits are oranges, lemons, figs, mandarins, apples, and pears. In Sept., 1958, there were 981,000 cattle, 9,300,000 sheep, and 658,000 hogs.

Development of large-scale Greek manufacturing is blocked by lack of coal resources and of capital. The most valuable products are textiles, chemicals and food items. Among other processed or manufactured products are olive oil, wine, spirits, flour, carpets, leather, cigarettes and building materials.

Leading customers in 1958 were West Germany (20%), other European countries (22%), and the U.S. and Canada (14%); leading suppliers, the U.S. and Canada (14%), West Germany (20%), and Britain (10%). Leading exports were tobacco (36%) and currants and raisins (14%).

The merchant marine plays a vital part in the national economy.

Reconstruction of the Greek transport system, financed by U.S. aid, was completed in 1949; it included extensive work on highways, port and dry-dock facilities, railways and bridges.

NATURAL FEATURES AND RESOURCES. North central Greece, Epirus and western Macedonia all are mountainous. The main chain of the Pindus Mountains rises to 9,000 feet in places, separating Epirus from the plains of Thessaly. Greek Thrace is mostly a lowland region separated from European Turkey by the lower Maritsa River.

Among the many islands are the Ionian group off the west coast; the Cyclades group to the southeast; other islands in the eastern Aegean, including Lesbos, Samos and Khios; and Crete, the fourth largest Mediterranean island.

The Dodecanese, a group of thirteen islands in the Aegean Sea near the coast of Asia Minor, were ceded to Greece by the 1947 Italian peace treaty and were formally transferred on March 7, 1948.

Greek minerals are varied but are exploited only moderately. Principal ones are lignite, iron ore, iron pyrites, magnesite,

chromite, lead, bauxite, molybdenum, emery, marine salt and marble.

A fifth of the country is forested, largely with pine, fir and oak. Resin and turpentine are main forest products. The principal sea product is sponges.

Guatemala (Republic)

(República de Guatemala)

Area: 42,042 square miles.

Population (est. 1958): 3,546,000 (1950: Indian, 53.5%; mixed and other, 46.5%).

Density per square mile: 84.3.

President: Miguel Y. Fuentes.

Principal cities (est. 1958): Guatemala, 355,254 (capital); Quezaltenango, 33,726 (coffee, sugar); Puerto Barrios, 19,268 (port); Mazatenango 13,728 (coffee).

Monetary unit: Quetzal.

Language: Spanish.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Guatemala, the first nation to overthrow a Communist regime, in so doing deprived the Kremlin of a base of operations in the Western Hemisphere and forced its agents there to flee or go into hiding. Since that time—1954—the government has concentrated on improving the country's economic status, and with the help of the United States—\$80 million of aid in four years—appeared to be on the way to prosperity until a drop in coffee prices slowed down the economy. Coffee constitutes more than 75 per cent of the country's exports. Strikes of railroad workers and port employees also contributed to unsettled conditions, although the government's policy of agrarian reform—giving fifty-acre plots of land to the landless—continued. Early in 1959 an austerity program was put into effect which included a surcharge of 100 per cent on tariffs on goods imported from twenty-eight countries with which Guatemala had an unfavorable balance of trade. In foreign affairs it was involved in a dispute with Mexico over fishing rights in what Guatemala claimed were its territorial waters. As a result of the strafing of Mexican fishing boats, Mexico broke off diplomatic relations, which were resumed in Sept., 1959.

thrown in October, and in December Juan José Arévalo was elected as the head of a leftist regime which continued press its reform program in the face of conservative resistance. He took office March 15, 1945. Jacobo Arbenz Guzmán, administration candidate with pro-Communist leanings, won the Nov., 1950, elections, took office March 15, 1951, and was ousted in 1954.

A new Constitution has been adopted to take the place of that of 1945, which provided that a President be elected every six years by direct vote and could not succeed himself immediately. Legislative power was vested in a unicameral National Assembly of 66 members popularly elected for four-year terms, half the members being elected every two years.

ECONOMIC CONDITIONS. Agriculture accounts 90 per cent of Guatemalans. Coffee accounts for a fifth of the cultivated land.

In 1958 the U.S. took 66 per cent of exports and supplied 60 per cent of imports. The chief exports were coffee (76%) and bananas (8%). Imports included flour, petroleum products, dyes and textiles.

NATURAL FEATURES AND RESOURCES. Most of Guatemala is mountainous, with many volcanic peaks. The northern part is the great plain of Petén, largely uncultivated and sparsely populated. The Pacific slope, well watered and fertile, is the most densely populated.

The country's vast forests, mostly in the Petén region, yield chicle for chewing gum, cinchona bark, a small amount of rubber and dyewoods and cabinet woods.

Guinea (Republic)

Area: 94,925 square miles.

Population (est. 1959): 2,665,000 (Fulani and Malinkés).

Density per square mile: 28.1.

President: Sékou Touré.

Premier: Sékou Touré.

Principal cities (est. 1957): Conakry, 65,000 (capital); Kankan, 24,600.

Monetary unit: Franc C.F.A. (Communauté Française d'Afrique, equal to 200 C.F.A. francs).

Languages: French, native tongues (Fanti, Ga).

Religions: Animist, Moslem, Christian.

STATUS IN THE WORLD TODAY

Guinea, formerly part of French Guinea, achieved its independence from France only colony to vote against the new French Constitution in September, 1958, and declared its new status on Oct. 2. Since then it has avowed position in foreign affairs has been one of pan-African neutralism, and has created, with Ghana, the Union of Independent African States, presently

HISTORY AND GOVERNMENT. Once the site of the ancient Mayan civilization, Guatemala, conquered by Spain in 1524, set itself up as a republic in 1839. From 1898 to 1920, the dictator Manuel Estrada Cabrera ran the country, and from 1931 to 1944 General Jorge Ubico Castañeda was the "strong man." In July, 1944, the National Assembly elected General Federico Ponce President, but he was over-

tion aimed at closer ties in the
tern nations, during the first year
Guinea's independence, felt the nation
headed toward the left because of the
trend of the government, headed
President Sékou Touré, and because of
rly commercial ties with Iron Cur-
countries. East European nations
the first to conclude trade agree-
with Guinea, to send technical and
ercial delegations, and "gift" ship-
of arms, and have tied up an esti-
60 per cent of the country's ex-
The Guinea government replied
Western nations, for fear of alienate-
rance, were slow to recognize the
nation and that it wanted economic
wherever it could obtain it.

omically, Guinea has long been
ized by France, and the withdrawal
ancial help and of administrative
nel upon achieving independence
the transition period difficult. Pri-
an agricultural country, its prin-
exports are bananas and coffee, al-
it has undeveloped riches in gold,
nds, iron ore, and bauxite. Private
from five foreign countries is un-
ting the first aluminum plant, but
more aid will be necessary to bring
oukoure Dam project into being.

HISTORY AND GOVERNMENT. Previously
of French West Africa, Guinea
ed independence by rejecting in Sep-
r, 1958, the new Constitution of the
Fifth Republic. On October 2, 1958,
rritorial Assembly of French Guinea
med the Independent Republic of
and transformed itself into a Con-
at Assembly. In December, 1958,
a was admitted to full membership
United Nations.

ECONOMIC CONDITIONS. Guinea is well
ed economically to be independent.
he second richest country in French
It is rich in bauxite (1958: 800,000
tons) and has great reserves of
ilic power.

Exports are coffee, bananas, iron
uxite, and palm kernels.

Haiti (Republic) (République d'Haïti)

: 10,748 square miles.
lation (est. 1959): 3,464,000 (Ne-
%; mulatto, 5%).
ity per square mile: 322.3.
dent: François Duvalier.
ipal cities (census 1950)*: Port-au-
134,117 (capital, chief port); Cap
a, 24,243 (seaport); Gonaïves, 13,634
ng district); Les Cayes, 11,608 (sea-
coffee).

Monetary unit: Gourde.

Language: French.

Religion: Roman Catholic.

* Cities proper, excluding surrounding communes.

STATUS IN THE WORLD TODAY

Intermittent political turbulence, al-
though it has little real influence on the
daily lives of the people of Haiti, continues
to be the order of the day in this island
republic, and as a result stability and sys-
tematic growth have yet to come to the
country's politics and economy. The elec-
tion of the present chief executive, Presi-
dent François Duvalier, put an end to one
of the shorter periods of chaos which al-
ternate with periods of dictatorship. Al-
though his regime has attempted to re-
store some semblance of order to the
nation's finances, it depends upon the
armed forces for its tenure in office. Haiti
is also unwillingly involved through
purely geographical reasons in the conflict
between the revolutionary forces in Cuba
and the dictatorship in the neighboring
Dominican Republic, with Generalissimo
Trujillo threatening to "protect" Haiti
with his troops if the revolutionaries op-
posing him try to land forces there.

Haiti is the one virtually all-Negro na-
tion of the hemisphere. It is a country of
small farmers, most of whom own and
cultivate mere patches of land. It has the
highest illiteracy rate, the deepest pov-
erty, and one of the most meager endow-
ments of natural resources of all the
countries of the hemisphere. Despite po-
litical instability, the farmers continue
to grow their infinitesimal amounts of
coffee and corn which the womenfolk
bring to the market on their heads. Close
to the spirit of their African ancestors,
they speak their own peculiar language—
a mixture of African dialects, French,
Spanish and English—and worship their
pagan gods, only slightly influenced by the
teachings of the Roman Catholic church.

HISTORY AND GOVERNMENT. Haiti
started its struggle for independence un-
der Toussaint L'Ouverture at the time of
the French Revolution in the 1790's. Al-
though this first attempt was suppressed
by Napoleon Bonaparte, a successful up-
rising led by Jean Jacques Dessalines in
1804 finally established Haiti as an in-
dependent nation.

In December, 1945, a revolution put
President Dumarsais Estimé in power. His
regime was one of the few democratic
episodes the country has experienced.
There was freedom of press and speech,
several political parties were organized, a
labor movement was established, and a
serious attempt was made to plan for the

country's economic development. Rudimentary labor legislation was enacted and the foundations of a social security system were laid.

However, President Estimé's attempt to perpetuate himself in power after his term had expired in December, 1949, brought another revolution, the victor of which was General Paul Magloire, who ruled until December, 1956. His régime, a dictatorship, continued many of the social and economic policies of its predecessor. President Magloire, in turn, attempted to stay in office after his term had ended and was overthrown. From December, 1956, until September, 1957, when President Duvalier was installed, there was a period of chaos.

Normally the President is elected for six years by two-thirds vote of the National Assembly. That body consists of a 37-member Chamber of Deputies, elected for four years by popular vote, and a 21-member Senate elected for six years.

ECONOMIC CONDITIONS. Haiti is predominantly agricultural. Coffee, which made up 62 per cent of Haitian exports, is the principal crop, followed by sisal, sugar cane, cotton, bananas, and cacao. Manufacturing is almost entirely for local consumption.

Leading exports in 1957 were coffee (62%), sisal (18%), and sugar (8%). Leading customers were the U.S. (33%), Belgium (21%), and Italy (13%); leading suppliers, the U.S. (62%), Canada (6%), Netherlands Antilles (5%), and Germany (4%).

NATURAL FEATURES AND RESOURCES. Haiti, about the size of Maryland, is two-thirds mountainous, with the rest marked by great valleys, extensive plateaus and small plains. The most densely populated and productive region is the Cul de Sac plain, near Port-au-Prince.

Honduras (Republic)

(República de Honduras)

Area: 43,227 square miles.

Population (est. 1959): 1,887,000 (1945: mestizo, 89.9%; Indian, 6.7%; Negro, 2.1%; white, 1.3%).

Density per square mile: 43.6.

President: Ramon V. Morales.

Principal cities (census 1950): Tegucigalpa (including twin city of Comayagua), 72,385 (capital); San Pedro Sula, 21,139 (bananas); La Ceiba, 16,645 (seaport, bananas); Tela, 12,614 (seaport).

Monetary unit: Lempira.

Language: Spanish.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Honduras, which has had a long history of military dictatorships and political in-

stability, installed a democratically elected administration in January, 1958. There have been several attempted uprisings since then, although the army has pledged itself to uphold constitutional government, and there have been unofficial reports that the would-be rebels backed by dictators in the Dominican Republic and neighboring Nicaragua, signing on Feb. 26, 1959, of an agreement between Honduras and Nicaragua to prevent their territories from being used to mount rebellions against each other, rise to hopes that Honduras might be able to concentrate on its economic problems. It has received several loans to diversify its current coffee-banana economy through the construction of a hydroelectric project and the establishment of a paper and pulp industry.

HISTORY AND GOVERNMENT. Columbus discovered Honduras on his last voyage in 1502. Honduras declared its independence from Spain in 1838, and has been troubled by revolution and war ever since. American Marines intervened in 1903 and 1922. In 1931, 1932, and 1937 major revolutions were crushed by force. The Nicaraguan-Honduras boundary dispute of 1937 also caused war, and in April, 1945, the country was invaded from Guatemala by a group of Honduran exiles, who were suppressed. The Constitution of Honduras provides for a President elected by popular vote for only one term of 6 years and for a unicameral Congress elected by popular vote for 6 years.

ECONOMIC CONDITIONS. In 1958 the U.S. took 63 per cent of the exports and supplied 61 per cent of the imports. Leading exports were bananas (56%), coffee (15%), and silver (3%).

NATURAL FEATURES AND RESOURCES. Honduras, in the north central part of Central America, has a 400-mile Caribbean coast-line and a 40-mile Pacific frontier. Generally mountainous, it has fertile plateaus and river valleys and narrow coastal plains.

Gold and silver are the most important mineral products of Honduras.

Hungary (Republic)

Area: 35,905 square miles.

Population (estimated 1959): 9,800,000 (Magyar, German, Slovak).

Density per square mile: 275.5.

Chairman of Presidium: István D. Prime Minister: Ferenc Munnich.

Principal cities (est. 1957): Budapest, 1,850,000 (capital, Danube port); Munkacs, 150,000 (industrial center); Debrecen, 100,000 (livestock); Szeged, 100,000 (textiles, wheat); Pécs, 110,000 (farming).

etary unit: Forint.

languages (census 1949): Hungarian, 93.2%; Slovak, .3%; German, .2%; Russian, .2%; others, .6%.
 Religions (est. 1956): Roman Catholic, 66.8%; Calvinist, 22.8%; Lutheran, 3.3%; Greek Orthodox, 2.5%; others, 1.1%.

STATUS IN THE WORLD TODAY

Hungary, where communism came at gunpoint and could be restored by Red Army tanks when, in 1956, the puppet government was swept out of office, is popular, nation-wide revolt, is out of tranquil now only because of the continued presence of Soviet troops. Recognizing the fact that even the workers opposed to the regime, the government has liquidated the workers' councils and as many of their leaders. Many intellectuals have been arrested and imprisoned. The shaky administration is determined to settle scores with all those who collaborated in overthrowing the old democratic order." Thousands were executed, placed in internment camps, imprisoned, or deported to Siberia. More than 200,000 managed to flee the country, however, and as a result the communist party faces a manpower shortage in many fields, especially the professions. Economically, Hungary is at least temporarily liable to the Soviet bloc. The revolution, although unsuccessful because of Soviet intervention, did, however, cause incalculable harm to the communist cause. The bloody suppression produced a revulsion of feeling against the regime and led to the disillusionment of the Communist or Communist sympathizer. It also smashed the myth of the infallibility of the totalitarian system from which it emerged and demonstrated the elemental truth of an aroused people. But the Iron Curtain has been rigidly drawn around Hungary to prevent the free flow of learning additional facts about the revolt, and United Nations observers and committees have been refused entrance to the country.

RELIGION AND GOVERNMENT. About a thousand years ago, Hungary was part of the provinces of Pannonia and Dacia on the empire's borders. In A.D. 896 it was invaded by the Magyars, who founded a kingdom. Christianity was accepted during the reign of Stephen I (St. Stephen) from 997 to 1038. The peak of Hungary's great period of medieval power came in 1342-82 under Louis the Great (Louis I) of Anjou, whose dominions touched the Baltic, Black, and Mediterranean seas. War with the Ottoman Empire broke out in 1389, and when the Ottoman smashed a Hungarian army in 1526,

western and northern Hungary accepted Hapsburg rule to escape Turkish occupation. Transylvania became independent under Hungarian princes. Intermittent war with the Turks was waged until a peace treaty was signed in 1699.

After the suppression of the 1848 revolt against Hapsburg rule led by Louis Kossuth, the dual monarchy of Austria-Hungary was set up in 1867.

The dual monarchy was defeated with the other Central Powers in World War I, and the new Hungary underwent hard times. First there was a short-lived republic in 1918. The chaotic Communist rule of 1919 under Béla Kun ended with the Rumanians occupying Budapest on Aug. 4, 1919. When the Rumanians left, Admiral Nicholas Horthy entered the capital with a national army. The Treaty of Trianon of June 4, 1920, cost Hungary 75 per cent of its land and more than 50 per cent of its population. Meanwhile, the National Assembly had restored the legal continuity of the old monarchy; and on March 1, 1920, Horthy was elected Regent.

Following the German invasion of Russia on June 22, 1941, Hungary joined the attack against the U.S.S.R., but the war was not popular and Hungarian troops were almost entirely withdrawn from the eastern front by May, 1943. German occupation troops set up a puppet government after Admiral Horthy's appeal for an armistice with advancing Soviet troops on October 15, 1944, had resulted in his overthrow. The German regime soon fled the capital, however, and on Dec. 23 a provisional government was formed in Soviet-occupied eastern Hungary. On Jan. 20, 1945, it signed an armistice in Moscow. On Feb. 1, 1946, the National Assembly approved a constitutional law abolishing the 1,000-year-old monarchy and establishing a republic.

ECONOMIC CONDITIONS. Agriculture is the basis of Hungarian economic life, engaging more than half the population. The Land Reform Act issued in March, 1945, provided for the confiscation of all estates over 284 acres; about 8,000,000 acres were divided among some 500,000 families. Cereals grown in the fertile Danubian plains are the chief crops. Leading crops in 1958 were wheat, potatoes, barley, rye, oats, maize, and sugar beets.

In addition, cultivation of vines, fruit and garden produce is important; the famous Tokay wine is produced on the southern slopes of the Hegyalja in the northeast.

Horse-breeding is a traditionally important branch of agriculture. Hungarians have a great love for horses, and their excellent breeds were exported in large numbers before World War II. Livestock in

1958 included 2,050,000 sheep, 5,338,000 hogs, 1,973,000 cattle, and 724,000 horses.

The dominant industries are all based on agriculture, with flour milling in first place, followed by sugar refining, brewing and canning. The second group of industries make hardware and machinery. Most of the machine industry is concentrated in Budapest and Győr. Cotton leads the textile industry, especially in Budapest, which is also a center of woolen manufactures. Hemp and flax weaving are important. An estimated 885,000 persons were employed in industry in 1954. Almost all industrial facilities were nationalized under laws passed in 1946, 1948 and 1949. In addition, the Soviet Union took over all German-owned plants as reparations, and in 1946 Soviet-Hungarian companies were formed to exploit bauxite, petroleum, and air and river navigation; the Soviet shares in these companies were sold to Hungary in 1954.

Leading exports include grain, textiles, live animals and products, and machinery.

NATURAL FEATURES AND RESOURCES. Most of Hungary is a fertile, rolling plain lying east of the Danube, and drained by the Danube and the Tisza Rivers. In the extreme northwest is the Little Hungarian Plain. South of that area is Lake Balaton, 250 square miles, the largest lake of western and central Europe.

While Hungary generally is mineral-poor, it has about 20 per cent of the world's known reserves of bauxite. The coal is of low quality and is insufficient to meet domestic needs. Other minerals include iron ore, manganese, and gold.

Iceland (Republic)

(Ísland)

Area: 39,768 square miles.*

Population (est. 1958): 169,000 (almost entirely Icelandic).

Density per square mile: 4.2.

President: Asgeir Asgeirsson.

Prime Minister: Olafur Thors.

Principal city (est. 1957): Reykjavik, 67,137 (capital and only large city).

Monetary unit: Króna.

Languages: Icelandic.

Religion: Evangelical Lutheran.

* Including several off-shore islands.

HISTORY AND GOVERNMENT. Iceland was first settled shortly before 900, mainly by Norse. A Constitution drawn up about 930 created a form of democracy and provided for an Althing, or General Assembly, now the oldest legislative body in the world. In 1262-64, Iceland came under Norwegian rule and passed to ultimate Danish control through the formation of the Union of Kalmar in 1483. In 1874 Icelanders obtained their own Constitution. In 1918 Denmark recognized Iceland

as a separate state with unlimited sovereignty, but still nominally under the Danish King. On June 17, 1944, after a popular referendum, the Althing proclaimed Iceland a completely independent republic.

The British occupied Iceland in 1940, immediately after the German invasion of Denmark. In 1942, the United States over the burden of protection. Iceland refused to abandon its neutrality in World War II, and thus forfeited charter membership in the United Nations, but it was operative with the Allies throughout. Iceland joined the North Atlantic Treaty Organization in 1949, and in May 1951, troops again landed at Iceland's request to aid in its defense preparations. Withdrawal of an Icelandic request for evacuation of U.S. troops was announced December 1956.

Constitutionally, the President of Iceland is elected for four years by popular vote. Executive power of the state resides in the Prime Minister and his Cabinet. The Althing (Parliament) is composed of 60 members in two houses. At an election, 52 members elect 17 of themselves to constitute the Upper House, the remainder members representing the constituencies of the Lower House. In May, 1959, the Althing passed a bill providing for a new system of proportional representation and increasing the number of elected representatives from 52 to 60. The Althing can dismiss the Cabinet and the latter can dissolve the former. The President of the Republic can veto bills and can be removed from office by the Althing provided this action is subsequently approved by majority vote in a national plebiscite.

ECONOMIC CONDITIONS. Approximately six-sevenths of Iceland is unproductive and only one-half of one per cent is under cultivation. With about 20 per cent of the population engaged in farming, sheep raising is the most important branch of this industry. Hay, potatoes, and turnips are the principal crops.

Fish and fish products account for 93 per cent of the exports in 1958. Leading customers were the U.S.S.R. (16%), the United States and Canada (13%), Britain (13%), EPU countries (31%), West Germany (13%); leading suppliers, the United States and Canada (14%), the U.S.S.R. (17%), and EPU countries (32%).

NATURAL FEATURES AND RESOURCES. Iceland, a bleak, volcanic island about the size of Kentucky, has maximum dimensions of 298 by 194 miles; it is a tableland, high, rugged, and barren. One of the world's most volcanic regions.

Small fresh-water lakes are scattered throughout the island, and there are many natural oddities, including hot springs, geysers, sulfur beds, canyons, waterfalls,

ivers. More than 13 per cent of the is covered by snowfields and glaciers, most of the people live in the 7 per of the island comprising fertile coast-. Vegetation is of the Arctic type, y stunted. Except for peat and fisher-celand has no natural resources.

out one-tenth of the people are en- in fishing, and fish and fish products up the bulk of Iceland's exports. The al catch averages approximately 350,- metric tons. Many European fishing visit Iceland's fisheries, which lead world in cod and are important for ng, plalce and halibut.

Indonesia (Republic)

(Republik Indonesia)

a: 575,893 square miles.*
 ulation (est. 1959): 89,600,000.*
 nesian, except for an estimated 1,500,-
 hinese and 100,000 Europeans in 1951).
 nsity per square mile: 155.6.*
 sident: Sukarno.
 mlier: Sukarno.
 nicipal cities (est. 1957): Jakarta, 1,-
 99 (capital); Surabaya, 1,043,283 (in-
 tal center); Bandung, 913,528 (com-
 al center, west Java); Semarang, 411,-
 (seaport, central Java); Surakarta,
 7 (industrial center); Makassar, 346,-
 (coffee, teak); Medan, 338,553 (rail cen-
 umatra).
 etary unit: Rupiah.
 nguages: Bahasa Indonesia (Malay)
 al), Dutch, Javanese, Sundanese,
 rese.
 gions: Moslem (predominant),
 an (about 2,500,000), Brahmin,
 hist.
 luding Netherlands New Guinea.

STATUS IN THE WORLD TODAY

onesia, like many another former y, is neutralist in its foreign policy, igh the local Communist groups tried to take advantage of the new y's political and economic difficul- o bring about a more pro-Soviet ori- on. Under President Sukarno's con- n of a "guided democracy," consist- ing part of a cabinet representing all s, they have had some part in the al government, although of late their nce has been curbed by anti-Com- ts in the army.
 nestic politics have been character- y a multiplicity of parties and grave nt instability. The centralization of s, particularly economic, in the of the government in Java eventu- ave rise in 1958 to widespread an- sm in the other islands, which felt ere being drained economically for enefit of the overcrowded Javanese, ed to armed rebellion. The central ment quickly and efficiently put

down the revolt, although scattered guer- rilla resistance still exists in outlying dis- tricts. But the resentment and the re- gional grievances, including a steady left- ward drift at Jakarta, had a moderating effect on the government, which has prom- ised a fairer economic deal for the outer regions in the future.

Indonesia's economic difficulties were further aggravated by the seizure of Dutch properties as a result of the dispute over West New Guinea, which the Dutch refused to turn over to Indonesia at the time of independence and which the latter claimed as an integral part of the republic. There was a sudden dearth of ship- ping to carry Indonesian exports because of a lack of trained personnel to operate ships and to operate other seized indus- tries. The West New Guinea dispute also led to a coolness toward the United States because of our refusal to support Indonesia in this matter.

In July, 1959, President Sukarno as- sumed dictatorial powers by dissolving the constituent assembly and reinstating the 1945 Constitution. Fiscal measures in Au- gust resulted in a financial crisis.

HISTORY. The sovereign state of Indonesia, a group of islands with a total area more than twice that of Texas, constitutes one of the world's richest natural areas. These islands—Sumatra, Java, Madura, central and southern Borneo, Celebes, and the Moluccas—would reach from San Francisco to Honolulu if their extent was transposed to the eastern Pacific. They have great wealth in tin, rubber, spices, oil, quinine, and copra.

During the first few centuries of the Christian era, most of the islands came under the influence of Hindu priests and traders, who spread their culture and religion. Moslem invasions began in the thirteenth century, and most of the area was Moslem by the fifteenth century. Portuguese traders arrived early in the sixteenth century but were ousted by the Dutch about 1595. After Napoleon subjugated the Netherlands homeland in 1811, the British seized the islands but returned them to the Dutch in 1816. In 1922 the islands were made an integral part of the Netherlands kingdom.

In World War II, the Japanese mili- tary occupation with nominal native self- government continued until Aug., 1945, except in outlying parts of New Guinea and Borneo. About the time of the Japa- nese surrender, a self-styled Indonesian Re- public headed by Achmed Sukarno sprang up and took over effective control of parts of Sumatra and Java. Allied forces, mostly British Indian troops, moved in, and fight- ing between them and the nationalists

continued until Nov. 15, 1946, when Dutch-Indonesian parleys resulted in a draft agreement that contemplated the formation by Jan. 1, 1949, of a Netherlands-Indonesian Union, consisting on the one hand of the Netherlands, the Netherlands Antilles and Surinam and on the other of the United States of Indonesia, which was to be a sovereign nation composed of three equal states—the Republic of Indonesia, East Indonesia, and Borneo. Differences of interpretation ensued, and the Dutch resorted to force on July 20, 1947. Both sides issued cease-fire orders on Aug. 4, 1947, in response to a call from the U.N. Security Council.

After the Dutch and the Republic signed another truce on Jan. 17, 1948, a provisional federal government for the whole area was installed on Mar. 9, 1948, but difficulties between the Dutch and the Republic continued. On Dec. 18, 1948, Dutch forces instituted "police" action against Republican areas and seized the Republican leaders. Hostilities ceased Jan. 1, 1949, following U.N. intervention. On May 7, the Dutch agreed to return the exiled Republican regime to central Java.

On Nov. 2, 1949, Dutch and Indonesian leaders agreed upon the terms of union between the Netherlands and Indonesia. Dr. Sukarno was elected President of the federation on Dec. 16 by representatives of the Indonesian states, and the first all-Indonesian Cabinet was formed with Mohammed Hatta as Premier. The transfer of sovereignty took place at Amsterdam on Dec. 27, 1949. In July, 1959, Sukarno decreed a full return to the 1945 Constitution.

ECONOMIC CONDITIONS. The islands of Java and Madura, with only 9 per cent of the area, have more than two-thirds of the population and are among the most densely settled areas in the world (more than 1,000 per sq. mi.). The people, including about 137 races and tribes, are mainly of Malayan stock, with the Javanese the most advanced.

Agriculture engages about 70 per cent of the adult males. Rich in a variety of crops, the islands prior to World War II produced about 31 per cent of the world's copra, 37 per cent of its rubber, 83 per cent of its pepper, and nearly all of its quinine. The big-estate agriculture on Java and Sumatra is devoted mainly to export. The rest is subsistence agriculture. Rice is the staple food and chief crop. Major plantation crops are rubber, tea, coffee, cinchona bark, palm kernels, and sugar. Others are copra, cacao, spices, agava fiber, and kapok. In addition to rice, the chief food crops are maize, cassava, sweet potatoes, peanuts, and soybeans.

In 1957 there were an estimated 5,160,-

000 cattle, 2,630,000 sheep, 1,469,000 horses, 484,000 horses, and 2,888,000 buffalo.

Industry, especially in Java, developed rapidly after 1930. In addition to industries connected with the processing of rich natural products, there were established chemical works, textile and paper mills, soap factories, breweries, shipyards, a Goodyear tire and rubber plant, and a General Motors assembly plant.

Indonesia is primarily an importer of consumer and capital goods and an exporter of mineral and plantation products.

Chief exports in 1958 were rubber (38%), petroleum and products (37%), tin (5%), and cocoanut products (3%). Leading importers were Singapore and Malaya (23%), the Netherlands (4%), the United States (17%), and Britain (13%); leading suppliers, the United States and Canada (17%), Japan (15%), the Netherlands (10%), and Britain (6%).

NATURAL FEATURES AND RESOURCES

A backbone of high mountain ranges extends throughout the main islands of the archipelago. Earthquakes are frequent, and there are many active volcanoes, ninety of them in Sumatra. Borneo is heavily forested.

Petroleum is the principal mineral product of modern Indonesia. The tin industry attained prewar levels more rapidly than others after World War II. Other important minerals include bauxite, coal, salt, nickel, and manganese.

Most valuable timber is teak, found mostly in east Java. Ebony, sandalwood, and ironwood also are cut.

Iran (Kingdom)

Area: 636,293 square miles.

Population (est. 1959)*: 20,149,000 (Persian, Kurdish, Azerbaijani).

Density per square mile: 31.7.

Ruler: Mohammed Riza Pahlavi.

Premier: Manouchehr Eghbal.

Principal cities (est. 1956): Tehran, 1,513,614 (capital); Tabriz, 290,195 (manufacturing center); Isfahan, 254,876 (textiles, tobacco); Meshed, 242,165.

Monetary unit: Rial.

Languages: Iranian (Persian), Kurdish, Azerbaijani.

Religions: Moslem (Shi'ah), about 85%; Moslem (Sunni), about 5%; Armenian Apostolic; Nestorian; Parsi.

* U.N. estimate; no census ever taken.

STATUS IN THE WORLD TODAY

Iran, as one of the Middle Eastern Islamic nations which is not of Arab origin, has not been subject to as much Western pressure from nationalist Arab sources as have other countries of the area. But as a nation bordering the Soviet Union, it has been subject to extreme anti-Western pressure from

because of the fact that it is a signatory to the Central Treaty Organization, a group comprising the "Upper Tier" states between the U.S.S.R. and the Far East.

A major oil-producing nation and an essential gateway to the rest of the Far East, Iran has long been a target of British imperialism. Early in 1959, Iran was negotiating a bilateral de-agreement with the United States, the Soviet Union offered to negotiate a aggression and economic pact if Iran refused to sign any agreement with the United States. Iran, however, elected to accept defense assistance from the United States, and again became the target of violent Communist abuse and of Soviet threats to invoke sections of a treaty which permits the U.S.S.R. to send troops into Iran if forces of a hostile nation enter the latter country. Iran was angered by denouncing the treaty article in question.

Though Iran is a major oil producer, it had to obtain nearly \$500 million in American aid since 1951. The Shah himself has taken steps to break down the land-ownership system, which provides fuel for Communist propaganda, by converting his own farm properties to estates of more than 300 villages.

PERSIA. Oil-rich Iran, was called Persia until 1935. Its key location blocks the land gate to Asia and also stands in the way of traditional Russian ambition for access to the Indian Ocean. In periods of Assyrian, Median, and Achaemenid rule, Persia became a powerful empire under Cyrus the Great, reaching from the Indus to the Nile at its height in 525 B.C. It fell to Alexander the Great in 330 B.C., to the Seleucids in 312-02 B.C. and to the Parthians about 130 B.C. A new Persian regime arose about A.D. 224, weakened fighting the Turks, and the Arabs in 637. In the twelfth century the Mongols took their turn ruling Persia, and in the early eighteenth century Persia and the Russians occupied it.

The Anglo-Russian convention of 1907 divided Iran into two spheres of influence. British attempts to impose a protectorate over Iran were defeated in 1919. On March 13, 1921, General Riza Pahlavi seized power and was elected hereditary monarch in 1925. Subsequently he did much to modernize the country and abolished all extraterritorial rights.

Increased pro-Axis activity led to Anglo-American occupation of Iran in August, 1941, and the deposition of the Shah in favor of his son, Mohammed Riza Pahlavi.

In November, 1945, a Soviet-inspired nationalist movement won control of Azer-

baijan, Iran's northwest province. To protect their advantage, the Russians kept troops in that area past the treaty evacuation date of March 2, 1946. The Iranians promptly protested this breach of agreement to the United Nations. The Russians evacuated their troops on May 6.

Ali Razmara became Premier June 26, 1950, and pledged to restore efficient and honest government, but he was assassinated March 7, 1951. Mohammed Mossadegh took over April 29. Parliament completed action on a bill nationalizing the oil industry over strong British protests.

Mossadegh was ousted Aug. 19, 1953, in a coup d'état led by Fazollah Zahedi, whom the Shah had named Premier. The oil dispute was settled in Aug., 1954. Hussein Ala succeeded Zahedi as Premier on April 7, 1955; Ala was succeeded by Manouchehr Eghbal April 3, 1957.

GOVERNMENT. Iran is a constitutional monarchy, and the Shah has the usual powers of the head of a parliamentary state. Executive power is exercised by a Cabinet headed by the Prime Minister, who is appointed by the Shah and is responsible to Parliament, the lower house of which (Majlis) has 136 popularly elected members and the upper house of which (Senate) has 60 members, half of whom are appointed by the Shah.

ECONOMIC CONDITIONS. Iran is predominantly agricultural. Large estates are numerous, and irrigation is common, especially on the central plateau. The principal crops are wheat and barley.

Other crops include rice, grapes, dates, apricots, tobacco, tea, cotton, sugar beets, and corn. There are extensive grazing lands. In 1958 there were an estimated 27,200,000 sheep.

Iran must still import many manufactured necessities, but several new factories were established by the government after 1925, including sugar plants, rice and oil mills, textile factories, a cement factory, copper smelter, glycerine factory, and small arms factory. Both sugar and tobacco are government monopolies. The manufacture of carpets, for which Iran is famous, is a valuable industry.

In 1957-58 the leading customers were the United States and Canada (11%), West Germany (8%), and other continental European Payments Union countries (27%); leading suppliers, West Germany (21%), other continental EPU countries (15%), and the United States and Canada (18%). The principal exports are cotton, petroleum, and rugs.

NATURAL FEATURES AND RESOURCES. Iran is, in general, a plateau averaging 4,000 feet elevation. In addition, there are maritime lowlands along the Persian

Gulf and the Caspian Sea. The Elburz Mountains in the north rise to 18,603 feet at Mt. Demavend. From northwest to southeast, the country is crossed by a desert 800 miles long.

Considerable mineral wealth exists, but only oil is exploited commercially. The principal field, near Shushar in the southwest, was worked until 1951 by the Anglo-Iranian Oil Company. The latter's concession began in 1901 and was to run until 1993, but its properties were nationalized by the Iranian government in April, 1951. Production under Iranian control was negligible. Under an agreement signed Sept. 19, 1954, Iran's oil is being produced, refined and marketed by a consortium of eight western oil companies, with 50 per cent of the profits going to Iran. The consortium began production Oct. 29, 1954.

The main forest belt on the northern Elburz slope supplies railroad ties, charcoal and firewood.

Iraq (Republic)

Area: 171,599 square miles.*

Population (census 1958): 6,590,579 (Arab, 75%; Kurdish, 15%; Iranian, 3.75%; others, 6.25%).

Density per square mile: 38.4.

President: Najib al-Rubai.

Premier: Brig. Abdul Karim Kassem.

Principal cities (census 1957, cities proper): Baghdad, 355,958 (capital); Mosul, 179,646 (oil); Basra, 164,623 (chief port).

Monetary unit: Dinar.

Languages: Arabic, Kurdish.

Religions (census 1947): Moslem, 93.6%; Christian, 3.1%; Jewish, 2.5%; others, .8%.

* Includes desert area of 80,583 square miles.

STATUS IN THE WORLD TODAY

The military regime which has ruled Iraq since the coup d'état of July, 1958, has thus far shown itself to be extremely anti-Western and ultra-nationalistic. It has gradually been expelling, or releasing, all military, economic, agricultural, educational, and other experts who had been brought in by the previous governments to help in the development of the country. Although it has enjoyed the support of the Communists since the beginning, it has discouraged all political parties, and a prominent Communist has yet to be named to high office. In fact, the Communists assailed Brigadier Kassem's choice of a Foreign Minister appointed on the first anniversary of the revolution. It remains to be seen how long the Communist-Kassem honeymoon lasts. As long as the Kassem regime carries out one of the basic Soviet aims—the elimination of all Western influence—there is no need for the popular front which is usually organized to help the Communists to power.

Although the Iraq revolutionary movement is nationalistic, and no doubt influenced by the success of Nasser's nationalistic administration in Egypt, it is not pan-Arabic to the extent that the United Arab Republic expected. During the first year, relations between the two governments were anything but friendly, the Cairo radio assailing the Communists and the U.A.R. allegedly having financed and organized a revolt against the Kassem regime by a group of young officers in the Mosul area early in 1959. A second "disturbance" in the same general area took place on the occasion of the anniversary when pro-Communist Kurds were joined by a few officers in fighting against the troops in Kirkuk. In recent decades, leaders of nationalistic Kurds, who inhabit parts of Iraq, Iran, and Turkey, and who would like to see the creation of an independent Kurdistan, have fled to the U.S.S.R. and been trained there by the Kremlin. Approximately 1,000 of these were turned to Iraq after the revolution. They can be presumed to be busy spreading Soviet propaganda in all three countries. To many of the Iraqi Kurds, however, Communist domination has become so oppressive that they have fled to neighboring Turkey.

With Iraq out of the Baghdad Pact, the name of the anti-Communist group was changed to the Central Treaty Organization, to be known as CENTO.

HISTORY. Iraq, a triangle of mountain, desert, and fertile river valley is bounded east by Iran, north by Turkey, west by Syria and Jordan, and south by Arabia. From earliest times it has been known as Mesopotamia—the land between the rivers—for it embraces a large part of the alluvial plains of the Tigris and Euphrates.

An advanced civilization existed in Mesopotamia by 4000 B.C. Sometime after 3500 B.C. it became the center of the ancient Babylonian and Assyrian empires. It was conquered by Cyrus the Great of Persia in 538 B.C., and by Alexander in 331 B.C. After an Arab conquest in A.D. 637–40, Baghdad became capital of the ruling caliphate. The country was cruelly pillaged by the Mongols in 1258, and during the sixteenth, seventeenth, and eighteenth centuries it was the object of repeated Turkish-Persian competition.

Nominal Turkish suzerainty imposed in 1638 was replaced by direct Turkish rule in 1831. In World War I an Anglo-French force occupied most of the country. Britain was given a mandate over the country in 1920. The British recognized Iraq as a kingdom in 1922 and terminated the mandate in 1932, when Iraq was admitted to the League of Nations.

League of Nations. In World War II, generally adhered to its 1930 treaty alliance with Britain, but in 1941 British troops were compelled to put down an Axis revolt led by Prime Minister Nuri al-Said. Iraq became a charter member of the Arab League in March, 1945, and British troops took part in the Arab invasion of Palestine in 1948. The 1930 treaty of alliance with Britain was terminated in 1955, and replaced by a defense coalition agreement.

King Faisal II, born on May 2, 1935, succeeded his father, Ghazi I, who was killed in an automobile accident on April 4, 1939. Faisal and his uncle, Crown Prince Abdullah, were assassinated in August, 1958, in a swift revolutionary coup which brought to power a military junta led by Abdul Karim Kassem. The short-lived "Arab Union," formed by the federation of Iraq and Jordan in February, 1958, came abruptly to an end with recognition of the U.A.R. of the rebel government of

ECONOMIC CONDITIONS. The chief economic activity is agriculture, dependent on irrigation and confined to the valleys of the Tigris and Euphrates. Iraq supplies about 80 per cent of the world's dates. Among the cereal products of Iraq are barley, wheat, rice, sorghum, maize, millet. Many fruits and some tobacco products are grown. Grazing is the principal occupation of the many nomadic and semi-nomadic tribes.

Industry is still embryonic. Of some importance are the most important are those producing brick, tile, woolen textiles, vegetable oils, soap, glass, and cigarettes.

Major exports in 1957 were petroleum products (3%), and barley (2%). Major suppliers in 1958 were Britain (1%), the United States and Canada (1%), and Japan (8%); leading customers were France (21%), Italy (19%), and the United States (6%).

The only port for seagoing vessels is that of Basra, located on the Shatt-al-Arab near the head of the Persian Gulf.

PHYSICAL FEATURES AND RESOURCES. Iraq is an arid desertland west of the Taurus, a broad central valley between the Euphrates and Tigris, and mountains in the northeast. The fertile lower part is formed by the delta of the two rivers which join about 120 miles from the head of the Persian Gulf. The gulf coast is about 26 miles.

Oil production is concentrated at the oil fields near Kirkuk, which are worked on behalf of an international consortium by the British-managed Iraq Petroleum Company. Associated companies operate at Zubair and Rumaila near Basra and at Ain Zalah and Butmah. The

Khanaqin Oil Company, a British Petroleum subsidiary, operates another field which produces only for local consumption.

Oil is piped to Tripoli in Lebanon, Baniyas in Syria, Fao on the Persian Gulf, and Haifa in Israel (suspended in 1948). The Iraqi government received an estimated \$250 million in oil revenues in 1959.

Ireland (Republic)

Area: 26,601 square miles (not including larger water bodies).*

Population (est. 1959): 2,846,000 (almost entirely Irish).

Density per square mile: 107.0.

President: Eamon de Valera.

Prime Minister: Sean Lemass.

Principal cities (census 1956): Dublin (Baile Atha Cliath), 539,476 (capital); Cork, 80,011 (seaport); Limerick (Luimneach), 50,886 (seaport).

Monetary unit: Irish pound.

Languages: Gaelic, English.

Religions (census 1946): Roman Catholic, 94.3%; Protestant Episcopal, 4.2%; Presbyterian, .8%; others, .7%.

* Total area: 27,136 square miles.

STATUS IN THE WORLD TODAY

Although there is little doubt that the Irish believe in the basic principles of Free Europe and strongly oppose the Soviet way of life, the Republic of Ireland has remained firmly aloof from political commitments in Western European integration of Free World alliances. This attitude, as well as Eire's official neutrality in World War II, can be traced to the problem of the division of the island into the republic, comprising the twenty-six southern counties, and the six northeastern counties of Ulster, with a separate government closely bound to England. Protestant in faith and largely industrial, whereas the republic is predominantly Roman Catholic and agricultural, Northern Ireland remains detached from the rest, despite the demand for Irish unity which still persists in Eire, a feeling often expressed in border raids and bombings. The official policy of the government of Eire, however, is that the solution must come about in a peaceful manner. The foreign policy toward the United States is extremely friendly.

HISTORY. About the beginning of the Christian Era, Ireland was divided into five kingdoms, each with its own ruler, but each subject to the overlord of all Ireland who dwelt at Tara. St. Patrick introduced Christianity in A.D. 432.

Norse depredations along the coasts, starting in 795, ended in 1014 with Norse defeat at the Battle of Clontarf by forces

under Brian. In the middle of the 12th century, the Pope gave all Ireland to the English Crown as a papal fief. In 1171 Henry II of England was acknowledged "Lord of Ireland," but local sectional rule continued for centuries, and English control over the whole island was not reasonably absolute until the 17th century. By the Act of Union (1800), England and Ireland became the "United Kingdom of Great Britain and Ireland."

A steady decline in the Irish economy followed in the next decades. The population had reached $8\frac{1}{4}$ million when the great potato famine of 1846-48 took many lives and drove millions to emigrate to America. By 1921 it was down to 4.3 million. In the meantime, anti-British agitation continued along with demands for Irish home rule. The advent of World War I delayed the institution of home rule and resulted in the 1916 Easter rebellion in Dublin. Guerrilla warfare against British forces followed proclamation of a republic by the rebels in 1919. The Irish Free State was established as a dominion in 1922, with the six northern counties as part of the United Kingdom. Ireland was neutral in World War II. Its last link with the British was broken in 1949, when the Republic of Ireland was proclaimed.

GOVERNMENT. Ireland is a sovereign, independent republic. The President, directly elected for seven years, names the Prime Minister on the nomination of the Chamber of Deputies. Parliament (Oireachtas) has two houses. The Chamber of Deputies (Dáil Eireann) has 147 members elected by proportional representation for a five-year term. The Senate (Seanad Eireann) has 60 members, of whom 11 are named by the Prime Minister, 6 by the universities, and 43 from vocational panels. Its powers, however, are limited.

The majority of the people are English speaking, although the government has attempted to promote the traditional Gaelic language, which is an essential part of the curriculum for all state schools.

ECONOMIC CONDITIONS. Principal crops are wheat, oats, potatoes, sugar beets. Other staple crops are rye, flax, turnips, cabbage, and hay. Livestock in June, 1958, included 4,498,000 cattle, 4,177,000 sheep, and (1956) 953,000 hogs.

Leading manufactures are ordinarily beverages, tobacco, wood, paper, clothing, textiles and metals. The hydroelectric plant erected on the Shannon River in County Limerick provides cheap electricity for homes and factories.

The United Kingdom (including Northern Ireland) was the leading customer in 1958 (77%). The United Kingdom was also the chief supplier (56%), followed by the U.S. and Canada (10%) and West Ger-

many (4%). Major exports were live animals (42%), beef and veal (6%), (5%), and chocolate crumb (5%). Imports were oils, fats, resins and gums, textiles, machinery, and vehicles.

NATURAL FEATURES AND RESOURCES. Occupying the entire island except for six northern counties of Ulster, Ireland resembles a basin—a central plain rimmed with mountains, except in the Dublin region. The mountains are low, with the highest peak, Carruntuohill, located in Kerry County, rising to a height of 1,418 feet.

The principal river is the Shannon, which begins in the north central flows south and southwest for about 200 miles and empties into the Atlantic. About 20 per cent of the country is covered by bogs. Among the many lakes are the famous Lakes of Killarney in the southwestern county of Kerry.

Ireland mines coal and gypsum.

Israel (Republic)

Area: 7,984 square miles.

Population (est. 1958): 1,997,000 (Jewish, 88.9%; Moslem, 7.6%; Christian, 2.5%; others, 1.0%).

Density per square mile: 250.1.

President: Itzhak Ben-Zvi.

Premier: David Ben-Gurion.

Principal cities (est. Dec. 31, 1956): Aviv-Jaffa, 371,000 (industrial center); Haifa, 160,000 (chief port); Jerusalem (Israeli sector), 149,440 (capital).

Monetary unit: Israeli pound (£I).

STATUS IN THE WORLD TODAY

Israel, friend of the West in the Middle East, has been under military threat from its Arab neighbors ever since it achieved its independence in 1948. At first it was supported by the Soviet Union, but the Kremlin quickly decided that it was not worthwhile to win some measure of Arab sympathy in the oil-producing Middle East nations. In recent years it has consistently backed the Arab countries against the Jews, and, in response to Arab protests, has at times curtailed the flow of Jewish immigration grants from behind the Iron Curtain. Israel.

Despite the constant threat of Arab attack, which has meant devoting a considerable portion of the budget to defense, Israel has made tremendous strides economically while at the same time absorbing large numbers of Jewish refugees from all over the world. Completion of a pipeline from the Red Sea to the Mediterranean will ease its dependence on use of the Suez Canal, which is barred to it frequently by the hostile Egyptians despite efforts of the United Nations to keep the waterway open.

to commerce of all nations. The swift conquest of the Sinai Peninsula enhanced its military position vis-à-vis Egypt and detracted somewhat from the prestige of the Nasser regime. A U.N. force guards the frontier between Israel and Egypt along the Gaza strip, but border clashes take place occasionally on the Egyptian and Syrian frontiers.

Palestine. The history of Palestine, cradle of the great religions of the world, and the homeland of the modern state of Israel, is a chronicle of invasion, conquest, and confusing divisions. To the ancient Jews it was known as the "Land of Canaan"; the name Palestine is derived from that part of the country inhabited by the Philistines of Biblical times. About 1200 B.C. the Hebrews succeeded in establishing a single monarchy, which later split up into two kingdoms—Judah and Israel. The country was subsequently invaded and overcome by many peoples, including the Assyrians, Babylonians, Egyptians, Persians, Macedonians, Romans, and Byzantines. In A.D. 634–36, Palestine was taken from the Byzantine Empire by the Frankish Crusaders captured Jerusalem in 1099 and set up a feudal kingdom which endured until the defeat of the Crusaders by Saladin (1187) and the restoration of Moslem rule. In 1516 suzerainty of the area was transferred from the Mamluks of Egypt to the Turks. It remained a part of the Ottoman Empire until World War I, when British forces under General Allenby defeated the Turks and captured Jerusalem (Dec. 9, 1917). The League of Nations mandate awarded to Britain was put in force on Sept. 29, 1920.

Meanwhile, a movement had been founded in 1897 by Theodor Herzl to create a Jewish homeland in Palestine, and a considerable number of Jewish immigrants entered the country prior to World War I. On Nov. 2, 1917, British recognition was given both to the growing Arab nationalist movement and to Zionist aspirations by the Balfour Declaration.

The British royal commission report, July 7, 1930, recommended partition of Palestine into an Arab and a Jewish state separated by a mandated area in the vicinity of Jerusalem and at Nazareth. The Arabs opposed the proposal, advocating instead the establishment of an independent Palestine with full minority rights for the Jews. In 1939, the British government issued a White Paper declaring the establishment of a Jewish state contrary to the obligations to the Arabs and promising, after a transitory period of ten years, the establishment of an independent Palestine in which Arabs and Jews would share authority in government.

During the next five years, 75,000 Jews were to be allowed to enter Palestine. These proposals did not satisfy either party, but the outbreak of World War II overshadowed all other issues.

End of European hostilities in 1945 brought a renewal of friction and the formation of the Arab League. Attempts to bring Jewish immigrants into Palestine illegally were intensified thereafter, and terrorism grew apace.

Termination of the British mandate May 14, 1948, and withdrawal of British forces brought new violence. An independent state of Israel was immediately proclaimed by the Jewish National Council, and Arab forces converged on Palestine from the south, north, and east, spearheaded by the crack British-trained Arab Legion of King Abdullah of Jordan. Within a few hours Arab-Jewish hostilities were in full swing. On June 11, however, there went into effect a four-week truce supervised by Count Folke Bernadotte, Swedish U.N. mediator in Palestine. Fighting resumed on July 9, with Israeli forces gaining on all fronts except in Jerusalem, part of which had been taken by Jordanian troops prior to the truce. On July 17 a second truce was effected on order of the U.N. Security Council. Bernadotte was assassinated on Sept. 17 by unidentified Jewish terrorists, and his duties were taken over by Dr. Ralph Bunche of the United States. A final cease-fire took effect on Jan. 7, 1949, and an armistice agreement was concluded with Egypt on Feb. 24 and with Jordan on April 3.

During the hostilities Israel lost none of the territory allotted to it under the partition plan and increased that territory by about 50 per cent by gaining western Galilee, a broad corridor to Jerusalem through central Palestine and part of modern Jerusalem. In April, 1950, Jordan incorporated eastern and central Palestine, including the Old City of Jerusalem.

Israel's governmental structure took shape rapidly. The provisional leaders, Chaim Weizmann and David Ben-Gurion, were confirmed as President and Premier, respectively. Recognized by most non-Arab countries, the new nation was admitted to the U.N. on May 11, 1949.

Despite many Cabinet crises, Ben-Gurion's government met with increasing success the problems arising out of an unfavorable trade balance, large numbers of immigrants and need for foreign capital investment and additional industries.

Dr. Weizmann died Nov. 9, 1952, and Itzhak Ben-Zvi was elected to succeed him as President on Dec. 8.

Israeli troops invaded Egypt on Oct. 29, 1956, and quickly took the Gaza strip and almost all the Sinai peninsula up to the

Suez canal. Following U.N. intervention, they were gradually withdrawn.

GOVERNMENT. The Israeli Constitution, adopted by the Constituent Assembly in 1949, provides a republican form of government headed by a President elected for a 5-year term by the Knesset (Chamber of Deputies). Legislative power is vested in the Knesset, whose 120 members are elected by the vote of all citizens who have reached the age of 21. The government is administered by the Cabinet, which is headed by the Premier and is responsible to the Chamber of Deputies.

The Knesset decided in June, 1950, that Israel would not have a formal written constitution but would acquire one gradually through the years. Israel is basically committed to the admission of every Jew who desires to settle within its borders, subject to control of the Knesset.

ECONOMIC CONDITIONS. Agriculture is the chief economic activity. The maritime plain, the plain of Esdraelon and the northern Jordan valley are the principal agricultural areas. Citrus growing, confined largely to the maritime plain, normally furnishes the major export crop. Others include olives, rice, fruits and vegetables, figs, tobacco, wheat, barley, corn, sesame, and potatoes. There are many collective rural settlements.

Industry is developing rapidly, especially the food-processing, textile, metalworking, and chemical groups. Diamond cutting, although dependent on rough diamond imports, is of major importance; and there are oil refineries and storage tanks at Haifa, a terminus of the pipeline from the Iraqi oil fields (suspended since 1948).

Chief exports in 1958 were citrus fruits (37%) and polished diamonds (22%). Leading customers were Britain (22%) and the United States and Canada (15%); leading suppliers, the United States and Canada (30%), EPU countries (34%), and Britain (12%). Leading imports were wheat (7%), rough diamonds (6%), and iron and steel bars (3%).

NATURAL FEATURES AND RESOURCES. Northern Israel is largely a plateau traversed from north to south by mountains and broken by great depressions, also running from north to south.

The maritime plain of Israel is remarkably fertile, but the southern Negev region, which comprises almost half the total area, is largely a wide desert steppe area. The Jordan, the only important river, rises in Syria and flows along the Jordan border through the Hule marshes and lake and the Sea of Tiberias (Galilee) into Jordanian Palestine and thence into the Dead Sea, 1,290 feet below sea level.

Mineral resources are limited. They in-

clude gypsum, sulfur, limestone, and salt, together with potash and bromine from the Dead Sea.

Italy (Republic) (Repubblica Italiana)

Area: 116,316 square miles.
Population (est. 1959): 49,055,000 (dominantly Italian).
Density per square mile: 421.7.
President: Giovanni Gronchi.
Premier: Amintore Fanfani.
Principal cities (est. 1956): Rome, 1,829,406 (capital); Milan, 1,355,410 (industrial, financial, industrial center); Naples, 1,096,755 (seaport); Turin, 853,179 (automotive works); Genoa, 727,012 (seaport); Palermo, 557,468 (Sicilian seaport).
Monetary unit: Lira.
Religions: Roman Catholic, 99.6%; others (Protestant, Orthodox, Jewish), 0.4%.

STATUS IN THE WORLD TODAY

The postwar Republic of Italy has firmly pro-Western in the cold war. It is a member of NATO. It has followed a policy despite a strong and persistent Communist opposition, although the majority of Italian Communists, with the exception of the leaders, reject the influence of Moscow and regard their voice as a reaction against fascism and a short-cut to economic betterment. In foreign affairs Italy has also tried to mediate between the Western and Arab powers, since it is no longer a colonial power, and has made considerable progress in obtaining oil concessions in the Middle East.

Western nations have helped Italy recover from the gravest sort of economic problems resulting from heavy damage during World War II. Under the Marshall Plan and ECA, Italy received \$1.8 billion. The United States paid most of the 10 million allocated by UNRRA for food relief and gave Italy twenty-nine ships as a result of this pump priming. Italy's agricultural and industrial productivity increased. But despite the remarkable progress in vitalizing economic life, only at the beginning has been made. Agricultural production is still unable to meet the demands of the Italian people. Land reclamation, especially turning over large estates to peasants, has been painfully slow. Genetic efforts are being made to close the gap between exports and imports. There are still some 2,000,000 unemployed in a working population of 21,000,000.

HISTORY AND GOVERNMENT: Until 476, when the German Odoacer became head of the Roman Empire in the west,

of Italy was largely the history of . From A.D. 800 on, the Holy Roman emperors, the Popes, Normans and Saracens vied for control over various segments of the Italian peninsula. Numerous states, such as Venice and Genoa, and small principalities flourished in the Middle Ages.

In 1713, after the War of the Spanish Succession, Milan, Naples, and Sardinia were handed over to Austria, which lost some of its Italian territories in 1735. After Italy was unified by Napoleon, who declared himself King of Italy on May 26, 1805, but after the Congress of Vienna in 1815, Austria once again became the dominant power in Italy.

Recent Italian experience seems to be an extension of a troubled history. In the Congress of Vienna restored the status to their former position of confused anarchy, like the Germanies a "geographical expression." The tyranny of the Restoration met with opposition by the *Carbonari* (charcoal burners), a secret society which demanded constitutional government and national unification. But Austrian armies crushed Italian uprisings in 1820, 1821, and 1831. In the 1830's Giuseppe Mazzini (1805-1872), brilliant liberal-nationalist, organized the *Risorgimento* (Resurrection), which laid the foundation for Italian unity.

Appointed Italian patriots looked to Austria for leadership. Count Camille di Cavour (1810-1861), Prime Minister of Italy in 1852 and the architect of Italian Italy, joined England and France in the Crimean War (1853-1856), and in 1859 helped France in a war against Austria, thereby obtaining Lombardy. By the Peace of 1860, Modena, Parma, Tuscany and the Romagna voted to join Italy. In 1860, Giuseppe Garibaldi (1807-1882) conquered Sicily and Naples and turned them over to Sardinia. Victor Emmanuel II, King of Sardinia, was proclaimed King of Italy on March 17, 1861.

Isolated with Germany and Austria-Hungary in the Triple Alliance of 1882, Italy declared her neutrality upon the outbreak of World War I on the ground that Germany had embarked upon an offensive. In 1915 Italy entered the war on the side of the Allies.

Benito Mussolini (1883-1945), a former socialist, organized discontented Italians in 1919 into the Fascist Party "to rescue Italy from Bolshevism." After winning the elections of the streets against the Communists the Black Shirts marched on Rome on October 27, 1922. Mussolini was made Prime Minister. The price of Fascist victory was the breakdown of parliamentary government. Mussolini destroyed Parliament, sus-

pended civil rights, wiped out political opposition, and transformed Italy into a dictatorship. He gave his people everything but freedom. His basic slogan—"Believe, Obey, Fight."

Mussolini's foreign policy was expansionist, designed to make the Mediterranean an Italian lake (*Mare Nostrum*). His designs on Corsica, Savoy, Nice, and Tunis enraged the French. In 1935 his troops invaded Ethiopia (Abyssinia) and annexed it despite stubborn resistance. In 1936 he aligned himself with Hitler in the Rome-Berlin Axis. Italian troops fought for Franco in the Spanish Civil War of 1936-1939. After the defeat of France in 1940, Mussolini joined Nazi Germany in World War II. The myth of Italian military strength was broken on the sands of Libya by British tanks and in Albania by Greek bayonets. The Italian dictator was caught and executed by partisans at Dongo on Lake Como on April 28, 1945.

Following the overthrow of Mussolini's dictatorship and the armistice with the Allies (September 3, 1943), Italy joined the war against Germany as a co-belligerent. In May, 1946, King Victor Emmanuel III left the country after installing his son as King Humbert II. But a provisional coalition government held a popular plebiscite in June, 1946. The Italians voted for a republic. King Humbert abdicated and followed his father into exile.

The President is elected for a term of seven years by Parliament in joint session with regional representatives. The President nominates the Cabinet, which is headed by the Premier, or Prime Minister. Parliament is composed of two houses: a Senate with 246 elective Senators and Deputies, of 590 members elected by the people for a five-year term. All Italian citizens, including women over 21, are duty-bound to vote.

PEACE TREATY OF 1947. The peace treaty which took effect Sept. 15, 1947, required Italian renunciation of all claims in Ethiopia and Greece, and the cession of the Dodecanese to Greece and of five small Alpine areas to France. In addition, the major part of the Istra peninsula, including Fiume and Pola, went to Yugoslavia. The Free Territory of Trieste was carved out of the area to the west of the new Yugoslav frontier.

Italy was to pay reparations of \$100,000,000 in kind over a seven-year period to the Soviet Union, \$125,000,000 to Yugoslavia, \$105,000,000 to Greece, \$25,000,000 to Ethiopia and \$5,000,000 to Albania; also to make two-thirds restitution for war-time damage to Allied property in Italy.

Zone A of Trieste (90 sq. mi.), including the city of Trieste, was transferred to

Italy in Oct., 1954, and the remainder to Yugoslavia.

RELIGION. Although the country is predominantly Roman Catholic, religious freedom is permitted. Catholic religious teaching is given in all elementary and intermediate schools. Relations with the Church are regulated by the treaty with the Holy See of Feb. 11, 1929, which established the temporal power of the Pope over Vatican City.

ECONOMIC CONDITIONS.

Agriculture. Agriculture engages more than a third of the population. It is extremely diversified; differences of altitude, soil and climate allow the production of all European crops from rye to rice, from apples to oranges, and from hemp to cotton. Italy ranks next to France in wine production, and next to Spain in olive-oil production.

Livestock and dairy farming are important in Italy. Of the 50-odd varieties of Italian cheese, the best known are the hard parmesan and pecorino (the latter made from ewe's milk) and the soft *bel paese* and *gorgonzola*. In 1958 Italy had 8,650,000 cattle, 8,507,000 sheep, and 3,800,000 hogs.

Industry. Industrial production is centered in the north. The nature of the fascist corporate state had a tendency to foster industrial concentration prior to World War II. The textile industry is the largest and most important and supplies the home market as well as furnishing a large proportion of Italy's exports. The metal industries are handicapped by lack of coal, which must be imported in large quantities, and by insufficient iron-ore reserves. The chemical, clothing and food industries are also important. Italy is a member of the European Coal and Steel Community.

Production includes cotton yarn, woven cotton fabrics, rayon yarn, pig iron and ferroalloys, raw steel, cement, automobiles, and trucks.

Trade. Italy's leading customers by value in 1958 were EPU countries (42%) and the U.S. and Canada (18%). Main suppliers were EPU countries (35%), the U.S. and Canada (18%), Latin America (7%), Britain (5%), and Iraq (5%). Leading exports were machinery and vehicles, fruits and vegetables, synthetic fibers and manufactures and cotton and manufactures. Leading imports included cotton, coal and coke, wool, grain, and petroleum and products.

NATURAL FEATURES AND RESOURCES. Approximately 600 of boot-shaped Italy's 708 miles of length are in the long peninsula that projects into the Mediterranean from the fertile basin of the Po River. The Apennines, branching off from the Alps between Nice and Genoa, form the peninsula's backbone, and rise to a maximum height of 9,560 feet at the Gran Sasso

d'Italia (Corno). The Alps are Italy's northern boundary.

Several islands form part of Italy. Sicily, 9,926 square miles, lies off the toe of the boot, across the Strait of Messina, with steep and rock-bound northern coast and gentler slopes to the sea in the south. Mt. Etna, an active volcano, rises to 10,741 feet, and most of Sicily is more than 500 feet in elevation. Sixty miles southwest of Sicily lies Pantelleria, 45 square miles, and south of that Lampedusa and Linosa. Sardinia, 23,340 square miles, just south of Corsica, is about 125 miles west of the mainland. It is mountainous, stony, and unproductive.

Italy has many northern lakes, lying low in the snow-covered peaks of the Alps. The largest are Garda (143 sq. mi.), Maggiore (83 sq. mi.), and Como (55 sq. mi.). The Po, the principal river, flows from the Alps on Italy's western border and crosses the Lombard plain to the Adriatic.

Natural Resources. Italy is ordinarily the world's largest producer of mercuric compounds. It is also an important producer of sulfur. The nation lacks, however, the staple minerals of coal, oil and iron, and is forced to import them.

In the south Tirol and in the central Apennines, abundant hydroelectric power resources and deposits of natural gas are being increasingly exploited.

Japan (Empire) (Nippon)

Area: 142,801 square miles.
Population (est. 1959): 92,740,000.
Density per square mile: 649.4.

Ruler: Emperor Hirohito.

Premier: Nobusuke Kishi.

Principal cities (census 1955): Tokyo, 6,969,104 * (capital; financial, manufacturing center); Osaka, 2,547,316 (chief industrial center); Nagoya, 1,336,780 (machinery, textiles); Kyoto, 1,204,084 (manufacturing); Yokohama, 1,143,687 (seaport); Kobe, 979,305 (seaport, shipbuilding).

Monetary unit: Yen.

Language: Japanese.

Religions (1938): Buddhism, 60%; Shintoism, 21%; Protestant (215,166); Roman Catholic (118,856).

* Estimated Aug. 1, 1959: 9,100,539.

STATUS IN THE WORLD TODAY

Japan, which has been transformed from a pacific democracy under civilian leadership, has aligned itself with the free world and more particularly, with the United States. In 1951 the two countries concluded a mutual-defense assistance agreement which was replaced by a new one in

made Japan an equal partner. It compels both countries to help each other in either is attacked on Japanese territory. It also provides for prior consultation with Japan before forces from U.S. bases can be used in any engagement other than the defense of Japan. Despite the concessions, leftists rioted but failed to prevent ratification.

Outside the military sphere, the United States has done its best to expand its trade and cultural ties with Japan, to encourage Japan to accept Japan as a partner, and to persuade the world community to recognize Japan again as a responsible and important member. The policy of the present administration is one of economic expansion without close government supervision, reversion of Occupation reforms and even revision of the constitution, gradual disarmament, and interdependence with the United States.

Other international problems still trouble Japan. The peace declaration of 1945 with the Soviet Union did not settle issues with the U.S.S.R. The question of what kind of relations to develop with the other states of the Soviet bloc, particularly mainland China, is pressing. Territorial claims and sensibilities still have not been pacified. Military relations with the United States require constant attention, and trade relations with all countries. Japan has been making satisfying progress in its international relations, and at the expense of supporting a large military establishment.

Increased imports are essential to Japanese economic growth, for the islands are small and poorly endowed. The key problem is how to secure the foreign exchange needed to pay for them. Japan is making an effort to expand its markets in the East, but on several occasions has taken an extraordinary step of itself limiting its exports to avoid a raising of the barriers by the United States. Two other major problems beckon—south and southeast Asia and mainland China. In the former case, there are three obstacles: distrust of Japanese motives engendered before and during World War II, shortage of capital, and competition from West Germany, Britain, and the United States. In the latter case, the Japanese government has enforced a partial boycott in accord with the policy enunciated by the League of Nations during the Korean War, while the Chinese government has adopted restrictive policies in attempting to use the promise of this trade to force the Japanese regime to recognize it diplomatically. The trade continues on an individual basis. Increased attention is being given in Japanese financial circles to the East, and Japan itself to provide more aid for the development of the south and southeast Asia region.

HISTORY AND GOVERNMENT. A series of legends attributes creation of Japan to the sun goddess, from whom the later emperors were allegedly descended. The first of them was Jimmu Tennō, supposed to have ascended the throne on Feb. 11, 660 B.C.

Recorded Japanese history begins with the first contact with China in the 5th century A.D. Japan was then divided into strong feudal states, all nominally under the Emperor, but with real power often held by a court minister or clan. In 1185 Yoritomo, chief of the Minamoto clan, was designated Shogun (Generalissimo) with the actual administration of the islands under his control. A dual government system—Shogun and Emperor—persisted till 1867.

First contact with the West came about 1542, when a Portuguese ship off course arrived in Japanese waters. Portuguese traders, Jesuit missionaries, and Spanish, Dutch, and English traders followed. Suspicious of Christianity and of Portuguese support of a local Japanese revolt, the shoguns restricted all foreigners in 1636–38 except the Dutch, who were confined to Nagasaki. Western attempts to renew trading relations failed until 1853, when Commodore Matthew Perry sailed an American fleet into Tokyo Bay.

Japan now quickly made the transition from a medieval to a modern power. Feudalism was abolished and industrialization was speeded. An imperial army was established with conscription. The shogun system was abolished in 1867 by Emperor Meiji, and parliamentary government was established in 1889. After a brief war with China in 1894–95, Japan acquired Formosa (Taiwan), the Pescadores islands, and part of southern Manchuria. China also recognized the independence of Korea (Chosen), which Japan later annexed (1910).

In 1904–05 Japan defeated Russia in the Russo-Japanese War, gaining the territory of southern Sakhalin (Karafuto) and Russia's port and rail rights in Manchuria. In World War I, Japan, which took a negligible part in military operations, seized Germany's Pacific islands and leased areas in China. The Treaty of Versailles then awarded her a mandate over the islands.

At the Washington Conference of 1921–22, Japan agreed to respect Chinese national integrity. The series of Japanese aggressions which was to lead to the nation's downfall began in 1931 with the invasion of Manchuria. The following year, Japan set up this area as a puppet state, "Manchukuo," under Emperor Henry Pu-Yi, last of China's Manchu dynasty. On Nov. 25, 1936, Japan joined the Axis by signing the anti-Comintern pact. The invasion of China came the next year, and the Pearl Harbor attack on Dec. 7, 1941.

For many months after Pearl Harbor, the Japanese army and navy enjoyed spectacular success, but by the end of 1942 the tide had begun to turn. Three years later the dropping of the world's first atomic bomb in combat on Hiroshima, followed by a second one on Nagasaki, knocked Japan swiftly into surrender.

The formal surrender took place Sept. 2, 1945, aboard the battleship *Missouri* in Tokyo Bay. Southern Sakhalin and the Kurile Islands reverted to Russia, and Formosa (Taiwan) and Manchuria to China. The Pacific Islands remained under U.S. occupation.

General of the Army Douglas MacArthur was appointed Supreme Commander for the Allied Powers (SCAP) Aug. 14, 1945. An 11-power (later 13-power) Far Eastern Commission was created to lay down occupation policies, while the 4-power Allied council advised and consulted with SCAP in carrying them out.

Japan's Constitution, promulgated in November, 1946, replaced the Meiji Constitution of 1889. The new Constitution, sponsored by the U.S. during its occupation of Japan, brought fundamental changes to the Japanese political system, including the abandonment of the Emperor's divine rights. The Diet (Parliament) consists of a House of Representatives of 467 members elected for 4 years and a House of Councillors of 250 members, half of whom are elected every 3 years for 6-year terms. Executive power is vested in the cabinet headed by a Prime Minister, who is elected by the Diet from its members.

Ruler. Emperor Hirohito, born April 29, 1901, succeeded his father, Yoshihito, on Dec. 25, 1926. He was married on Jan. 26, 1924, to Princess Nagako, born in 1903. To them were born two sons, Crown Prince Akihito (Dec. 23, 1933) and Prince Masahito (Nov. 28, 1935), and 5 daughters. Succession to the Japanese throne is in the male line only.

ECONOMIC CONDITIONS.

Agriculture. Japan is traditionally a land of small farms and, except in Hokkaido, the northernmost island, there is almost no large-scale farming and animal husbandry. The average holding is less than three acres. Double cropping makes self-sufficiency possible, but on a low level of subsistence.

In 1956 there were 3,202,000 cattle, 1,160,000 hogs, and 893,000 sheep.

Industry. Prewar Japan was one of the world's leading industrial nations and the only country in the Far East with highly developed textile, steel, machinery, chemical, and electrical industries. The textile industry was dominant, but after 1931 considerable expansion took place in the heavy industries—metal, machinery-build-

ing, and chemical—which were adapted to war purposes.

Postwar industrial rehabilitation proceeded slowly at first, but by the end of 1956 average industrial output was more than twice the 1934-36 level. Japan ranked the world in shipbuilding in 1956, coming off 1,538,000 gross tons of shipping vessels aggregating 1,538,000 gross tons, many of them super tankers.

The huge interlocking monopolies (*batsu*), controlling prewar business finance, were dissolved in 1945, and re-concentration was prohibited by postwar legislation.

Trade. Before World War II, Japan ranked fifth in world trade. Private trade was resumed in 1947; by the mid-1950s Japan had regained its place in world trade.

Leading customers in 1958 were the United States (23%), Hong Kong (10%), India (4%), and Malaya (3%); leading suppliers, the United States (34.8%), Australia (8%), Canada (4%), and Mexico (4%). Leading exports were textiles (34%), machinery (19%), iron and steel and manufactures (9%), and chemicals (4%). Imports included raw cotton (15%), petroleum and products (10%), wool, wheat (5%), and iron ore (5%).

Communications. Before World War II, the merchant marine carried almost 80 percent of the foreign trade and was supplied only by those of the United States and Britain. Wartime losses were enormous, but recovery was fairly steady. By June 1956, there were 1,891 vessels (100 tons and over) with a gross tonnage of 4,070,000 according to *Lloyd's Register*.

NATURAL FEATURES AND RESOURCES. Japan's four main islands are Hokkaido, Honshu, Kyushu, and Shikoku. Ryukyu chain to the southwest is partly occupied and the Kuriles to the north are Russian-occupied. The surface of the main islands consists largely of mountains separated by narrow valleys. There are about fifty more or less active volcanoes, including famous Fujiyama near Tokyo (12,385 ft.).

Minerals. Japan has relatively poor mineral resources, and large imports of coal, petroleum, and iron ore are necessary. Minerals include lead, silver, gold, and copper.

Jordan, The Hashemite Kingdom of

Area: 37,264 square miles.*

Population (est. 1959): 1,636,000.*

Density per square mile: 43.9.*

Ruler: King Hussein I.

Prime Minister: Bahjat al-Talhou

Principal cities (est. 1957): Amman

(capital); Jerusalem (Jordanian), 75,000 (religious center).
 Monetary unit: Jordanian dinar.
 Language: Arabic.
 Religions: Moslem (Sunni), 92%; Christian, 3%.
 Including Arab Palestine (area: 2,125 sq. mi.; population: 53,745,786).

STATUS IN THE WORLD TODAY

Jordan, although a cobelligerent with Israel, has lately remained aloof from the movement for pan-Arabism and of attempts to undermine its independence and to overthrow King Hussein. These plots were blamed in Amman on Egyptian and Syrian elements in the Arab Republic, and the Cairo radio stated for a considerable period of time that propaganda broadcasts urging the overthrow of King Hussein. At the time of the 1958 rebellion in Iraq, British paratroopers arrived to help safeguard Jordan's independence at the same time that United States Marines landed in Lebanon to help stop the spread of violence in the Middle East. Since that time, the U.A.R. has been forced to be more preoccupied with the Communist threat posed by the new Egyptian regime.

Jordan has a considerable agricultural potential if it could come to an agreement with Israel on the use of the waters of the Jordan River. But it is still technically at odds with Israel, and has incorporated Jerusalem into its territory. Egypt still has to live up to its agreement to furnish in furnishing the economic aid to Jordan which it lost when the British withdrew.

RELIGION AND GOVERNMENT. An ancient land, Jordan was known in the time of the Bible as Edom and Moab. It passed to the Romans as part of the Roman province of Syria. In 633-36 it was conquered by the

British. After World War I, Jordan was separated from the British Mandate for Palestine in 1920, and placed under the rule of Abdullah ibn al-Hussein.

In 1923 Britain recognized Jordan's independence, subject to the mandate. In 1946, Britain abolished the mandate and recognized the independence of Jordan. That same year, Palestine occupied by Jordan was formally incorporated by action of the Jordanian Parliament on Apr. 24, 1950. Jordan's rejection of the Baghdad pact in 1955, set off a period of instability and civil war. King Hussein was assassinated June 20, 1951. His son Talal was deposed as mentally ill in 1952. Talal's son Hussein, born

May 2, 1935, succeeded him. Jordan is a constitutional monarchy with a bicameral parliament. Its Chamber of Deputies of 40 members is elected for 4 years by male suffrage, and the 20 members of the Senate are appointed by the King.

Defense of the country is entrusted to the British-trained Arab Legion of about 20,000 men, the most effective force among all Arab armies. The Anglo-Jordanian treaty of Mar. 20, 1948, was terminated Mar. 13, 1957. Jordan had ousted the Legion's British commander on March 2, 1956, and Britain recalled most of its remaining military officers. In Jan., 1957, Egypt, Saudi Arabia, and Syria agreed to provide the equivalent of the former British defense subsidy. In February, 1958, Jordan and Iraq united to form the "Arab Federation," subsequently called the "Arab Union," but this federation came abruptly to an end with the revolutionary coup in Iraq in August, 1958.

ECONOMIC CONDITIONS. Life in Jordan is primitive; there are estimated to be 50,000 nomads and 120,000 seminomads. At least 95 per cent of the total area is desert.

Most of the country is suitable only for pasturing sheep, goats, and camels. Cultivated land is limited to a relatively small area west of the Hejaz Railway. In the drier cultivated areas of the plateau, the inhabitants retain tribal organization and still live in tents. Foreign trade consists largely of the exchange of wheat, fresh fruit, wool, and live animals for sugar, tea, and other necessities.

Korea (Chosen; Chosŏn)

Area: 85,266 square miles.
 Population (est. 1957): 30,500,000, almost entirely Korean).

Density per square mile: 357.7.
 President, South Korea: Yun Po Sun.
 Premier, South Korea: Dr. Chang Myun.
 Premier, North Korea: Kim Il-sung.
 Principal cities (est. 1959): Seoul, 1,700,000 (capital, south Korea); Pusan, 1,049,363 (chief port); (est. 1952) Pyongyang, 500,000 (capital, north Korea); (census 1955) Taegu, 488,960 (silk center).

Monetary unit: Hwan.
 Languages: Korean, Chinese, Japanese.
 Religions: Buddhist, Confucianist, Taoist, Christian (500,300 Christians in 1938).

STATUS IN THE WORLD TODAY

North Korea became a Communist satellite as the result of a military agreement which permitted Soviet Russia to accept the Japanese surrender north of the 38th parallel in Korea. Soviet forces occupied the northern zone, established a puppet government, and although an agreement was reached in Moscow in 1945 to establish a joint commission to unify the two

zones under a provisional Korean government, supervised by a four-power trusteeship, there was no agreement on how this could be done. Since the Korean War, the country has been to all intents and purposes an appendage of Red China, and the ruling officials apparently have been building up the Communist military strength despite the provisions of the 1953 armistice agreement. In the spring of 1958 the Red Chinese announced that they had begun to move their "volunteers" out of North Korea and that they would complete their withdrawal by the end of the year. It may be that the North Korean forces have been so strengthened that they are considered now capable of defending or extending the regime themselves. This may have been the reason for Chou En-lai's call for all foreign troops to be evacuated from the peninsula as preliminary to an all-Korean election to establish a new, unified government. Intelligible military and economic data are lacking, but the Communist regime is reported to have received aid from eight of the Communist-bloc nations, the largest grants coming from the U.S.S.R. and Red China.

The Republic of Korea was strongly pro-democratic and anti-Communist even before the Communist invasion from North Korea and has been a staunch supporter of the free world since its organization in 1948. Its struggle to build a free and independent country has met with staggering economic problems as a result of the civil war. Relief and reconstruction have gone forward, with nearly \$2 billion in relief and aid having been given since 1950 by the United States and the United Nations. Even this has been insufficient, however; production has increased little beyond the 1949-50 level and has hardly kept pace with the growth in population. Trade has been encouraged, but the traditional exchange with Japan has not been restored and relations between the two countries are further complicated by a fisheries dispute. Because of the military build-up believed to have taken place in North Korea, the ROK has felt it imperative to maintain comparatively large military forces. These have been strengthened since June, 1957, when the U.N. command announced that breaches of the armistice agreement by the opposing side freed it to equip its own men with more modern weapons.

Although Dr. Syngman Rhee spent 50 years fighting for Korean independence, his rule as president became increasingly autocratic. He declared martial law and arrested assemblymen who opposed his legislative and constitutional proposals. When an amendment exempting him from a two-term limit as president failed to pass, his Liberal party declared it adopted

anyway. Widespread charges of ballot stuffing, trickery, fraud and strong tactics in the March, 1960, elections returned him to a fourth term as president. This resulted in wide-spread riots. Under pressure at home and abroad to end repression and restore democratic rule, President Rhee finally resigned.

HISTORY. According to myth, Korea peninsula about 600 miles long, was founded in 2,333 B.C. by Tangun. His dynasty is said to have ruled until 1122 B.C. when a Chinese sage, Kija, established a dynasty supposed to have ruled until 221 B.C. Later, three kingdoms were established, one of which (Silla) absorbed the other two in A.D. 668-669. In 1627 the Manchus seized Korea and placed it under Chinese sovereignty.

In the Chinese-Japanese War, 1894-95, Japan won predominant influence in Korea, and in 1910 Japan formally annexed it. A Korean bid for independence was crushed ruthlessly in 1919.

In Aug., 1945, at the end of World War II, Korea was occupied by Soviet and U.S. troops. The United States and the U.S.S.R. were unable to agree on the formation of an all-Korean provisional government. In Nov., 1947 the U.N. General Assembly set up a commission, boycotted by the U.S.S.R., to arrange for elections. Elections were held in the U.S. zone on May 10, 1948, for a national assembly, which on July 20 adopted a republican Constitution and elected Syngman Rhee President. The new republic was proclaimed on July 15 and was recognized as the legal government of Korea by the U.N. General Assembly on Dec. 12, 1948. Meanwhile the North Korean "People's Republic" had been formed in the Soviet zone north of the 38th parallel on May 1, 1948. It claimed jurisdiction over all of Korea.

On June 25, 1950, South Korea was attacked by North Korean Communist forces. U.S. armed intervention was ordered on June 27 by Pres. Truman and on the same day the U.N. invoked military sanctions against North Korea. Gen. Douglas MacArthur was named commander of U.N. forces on July 7. U.S. and South Korean troops fought a heroic holding action; by the first week of August, they had been forced back to a 4,000 sq. mi. beach in southeast Korea. There they stood against superior North Korean forces until September, when a major U.N. amphibious landing was launched far behind the Communist lines at Inchon, port of Seoul. By September, U.N. forces were in complete control of South Korea; they then invaded North Korea and were nearing the Manchurian and Siberian borders when several hundred thousand Chinese Communist

d the conflict in late October. U.N. then retreated successfully below the parallel, where they repulsed several major attacks.

May 24, 1951, UN forces recrossed the parallel and had made important new gains into North Korea when truce negotiations began on July 10. An armistice was signed at Panmunjom on July 27, leaving a devastated Korea in need of large-scale rehabilitation. The armistice contemplated an international political conference on the status of Korea, negotiations for arranging it broke down. The question was discussed without result at the Geneva conference on Far Eastern problems (April 26-June 19, 1954).

U.S. and South Korea signed a mutual defense treaty on Oct. 1, 1953, and in 1953 the U.S. Congress authorized \$200,000,000 for rehabilitation and economic support of South Korea.

CLIMATIC CONDITIONS. The Korean climate is more or less homogeneous and successfully withstood Japanese efforts to dominate it. South Korea has 43 per cent of the peninsula's area and over two-thirds of its population. Korea is pre-eminently agricultural.

INDUSTRIAL DEVELOPMENT was speeded in the last years of Japanese rule. The leading industries by value of output ordinarily are chemical, textile, food, beverage, and tobacco. Korea north of the 38th parallel has by far the larger portion of the country's industry and abundant hydroelectric resources.

FOREIGN TRADE. Korea's prewar foreign trade was closely tied with that of Japan. South Korea's foreign trade has been financed to a large extent by U.S. funds. Most of the trade is with the United States, Japan, and Hong Kong. Chief imports were foods and manufactured goods; chief exports, raw materials including tungsten, graphite, and iron ore. North Korea's trade is chiefly with Communist China and the U.S.S.R. South Korea is insolvent and dependent on U.S. aid and other contributions.

PHYSICAL FEATURES AND RESOURCES. The coast, with a rugged mountain range along the east, is fringed with more than 1,000 islands. Several rivers are navigable for more than 100 miles, including the Mekong in the south, the Han in the north-central region, and the Yalu in the north.

MINERAL PRODUCTS are coal, gold, silver, tungsten ore, iron ore, graphite, uranium stone, and pyrite ore.

Laos (Kingdom)

91,506 square miles.
Population (est. 1958): 1,690,000.

Density per square mile: 18.5.

Ruler: King Savang Vathana.

Premier: Prince Souvanna Phouma.

Principal cities (est. 1953): Vientiane, 60,000 (administrative capital); Luangprabang, 18,000 (royal capital).

Monetary unit: Kip.

Language: Laotian.

Religion: Buddhist.

STATUS IN THE WORLD TODAY

Laos, a former province of French Indo-China which the Communists expected to take over without any trouble, has managed to maintain its independence with the help of American military and financial aid. In a move representing a defeat for both the pro-Communists and the pro-neutralists, the National Assembly in January, 1959, gave the regime of Premier Phouli Sananikone the power to govern the country for one year without reference to the legislature. During this period the government hopes to suppress Communist subversion and to carry out social and economic reforms. After the year was up, the government resigned over a constitutional technicality on extending its mandate. The Communists in the northern provinces have been supported from northern Vietnam and there have been a number of frontier incidents along the 800-mile frontier which Laos shares with that Communist satellite and Red China. The difficulty of patrolling this long border has also resulted in making Laos a haven for thousands of refugees from Red China.

Economically the least developed former unit of Indo-China, Laos is sparsely populated and has just begun to modernize its backward economy. It has no railroads and few passable roads. It has been receiving between \$30 and \$40 million annually in American aid. Whatever the truth of charges of inept and unimaginative American administration and widespread corruption on the part of Laotian officials, the program does appear to have averted Communist threats to take over the country, although it may not, to date, have greatly speeded up the process of economic growth.

Renewed attacks by Communists in August, 1959, allegedly supported by forces from North Vietnam, brought a plea in the U.N. from Laos for intervention against invasion. In September, the Security Council voted to send a fact-finding commission. It found no evidence of organized aggression by outside forces, but it did find that some aid might have been sent to Communist rebels from North Vietnam. To discourage aggression, the U.N. maintains a "presence" in Laos in the form of several members of the commission staff.

HISTORY AND GOVERNMENT. Sparsely settled Laos occupies the northwestern

portion of Indo-China. In the fourteenth century, a unified Lao kingdom of Lanxang was constituted on both sides of the Mékong river. It was divided in the seventeenth century into the two kingdoms of Vientiane, which was annexed by Siam in 1827, and Luangprabang, which recognized Siamese suzerainty shortly thereafter. In 1893 both kingdoms passed to France.

Laos was reunited in 1947 as a constitutional monarchy under the Luangprabang dynasty. In 1950 it became an associated state in the French Union. The transfer of sovereignty was completed by the Paris agreements of Dec. 29, 1954. The constitution of May, 1947, provides for a National Legislative Assembly elected by popular vote. In 1958 women were granted the franchise and voting qualifications were liberalized, thereby increasing the total number of Assembly seats from 38 to 59.

SOCIAL AND ECONOMIC CONDITIONS. About half the people are Laotians who live mainly in the Mékong valley, and half are mountain tribes of Chinese and Indonesian extraction. There are sizable Chinese and Vietnamese minorities.

About 95 per cent of the people are farmers. The chief food crop is rice; others are maize, vegetables, cotton, cardamons, and tobacco. The leading exports are benzoin, coffee, opium, and lac; cattle and teak are also exported. Laos is the least developed of the former Indo-Chinese states and has little modern industry. Tin is the only mineral of importance. The northern forests are rich in valuable timber, notably teak; the logs are floated down the Mékong. The latter, in spite of rapids, is the chief transportation route.

Latvia

Area: 24,595 square miles.

Population (est. 1959): 2,094,000 (1940: Lettish, 75.5% [1950: 58%]; Russian, 12%; German, 3.2%; Polish, 2.5%; others, 6.8%).

Density per square mile: 81.3.

Principal cities (est. 1959): Riga, 604,500 (capital); Liepaja, 71,400 (seaport).

Language: Latvian.

Religions (census 1930): Lutheran, 56.6%; Roman Catholic, 23.7%; Greek Orthodox, 8.9%; others, 10.8%.

HISTORY AND GOVERNMENT. Descended from Aryan stock, the Latvians were early tribesmen who settled along the Baltic Sea and, lacking a central government, fell an easy prey to more powerful peoples. The German Teutonic Knights first conquered them in 1158 and ruled the area as two states—Livonia and Courland. Poland conquered the territory in 1562 and ruled until 1795 in Courland; control of Livonia was disputed between Sweden and Poland from 1562 to 1629. Sweden controlled Li-

vonias from 1629 to 1721. Russia took Livonia in the latter year and Courland after the third partition of Poland in 1795. From that time until 1918, the Latvians remained Russian subjects, although they preserved their language, customs, and folklore. The Russian Revolution of 1917 gave them their opportunity for freedom, and the Latvian republic was proclaimed on Nov. 18, 1918.

The republic lasted little more than twenty years. It was occupied by Russian troops in 1939 and incorporated into the U.S.S.R. in 1940. German armies occupied the nation from 1941 to 1943-44, and they were driven out by the Russians. Most countries, including the United States, have refused to recognize the Soviet annexation of Latvia.

Lebanon (Republic)

Area: 4,015 square miles.

Population (est. 1958): 1,550,000 (Arabic, Armenian, Circassian, Turk).

Density per square mile: 386.1.

President: Fouad Chehab.

Premier: Saeb Salaam.

Principal cities (est. 1958): Beirut, 1,000 (capital, chief port); Tripoli, 110,000 (oil pipeline terminus).

Monetary unit: Lebanese pound (L.L.).
Languages: Arabic, French.

Religions (est. 1954): Christian, 60%; Moslem, 44%; others, 2%.

STATUS IN THE WORLD TODAY

Since the 1958 insurrection, when Lebanon was charged with intervention in Jordan's internal affairs, and the landing of United States Marines—at Lebanon's request—during the uncertainty which followed the overthrow of the Hashemite monarchy in Iraq, this half-Christian, half-Moslem nation has moved closer to active neutralism. It has, however, begun to deport Arab Communists, disarm the Palestinian population, and maintain neutrality between Nasser and Egypt on the one hand, and Kassem and Iraq on the other. Its swift economic recovery following the civil strife was aided by \$12.5 million from the United States, and Lebanon, who had made their nation the most prosperous in the Middle East, rapidly resuming their former position. Relations with the U.A.R. have been formalized, with a pledge by Nasser in March 1959 to respect Lebanon's independence and the signing of an economic pact ten months later.

HISTORY AND GOVERNMENT. In ancient times Lebanon was the mountainous hinterland of the Phoenician coast. From the seventh to the eleventh

there infiltrated into southern Lebanon the heretics of Islam, who finally merged into the Druse community.

In the nineteenth century the Turkish sultan encouraged the Druses to wage war against the Christian Maronites. A massacre of 2,500 Christians in 1860. Lebanon was occupied by the French for 40 years. From 1864 to 1914, a Christian military government ruled the area under nominal Turkish sovereignty. After World War I, France received a League of Nations mandate over Syria and Lebanon. France drew a Lebanese border in which the area was predominantly Moslem Syria. France proclaimed the area a republic under French control on May 23, 1926. Complete independence came on Nov. 26, 1941. Lebanon joined the Arab League and took part in the invasion of Palestine on May 15, 1948.

GOVERNMENT. The modern Lebanese republic is governed by a President elected for a five-year term, and a Council of Ministers appointed by the President, but responsible to Parliament. The President has 66 members elected for a four-year term by universal suffrage. Voting is compulsory.

ECONOMIC CONDITIONS. Lebanon produces tobacco, olives, grapes and other fruits, wheat, and silk. Manufacturing is limited mainly to local consumers' goods. The textile industry is important in Beirut and Tripoli. Tobacco manufacturing is a virtual monopoly. An oil refinery was built at Tripoli in 1950 and its facilities are currently expanded.

Major trading customers in 1958 were Saudi Arabia (13%), Syria (18%), and France (17%). Leading suppliers, Syria (11%), Saudi Arabia (17%), and the United States and Canada (13%). The leading exports were fruits, vegetables, barley, and cotton. The oil pipelines from the Kirkuk in Iraq terminates at Tripoli; the Arabian pipeline from Saudi Arabia to Sidon.

Liberia (Republic)

Area: c. 43,000 square miles.
Population (est. 1956): 1,250,000 (native 99%; American Negro, .8%; white, .1%; others, .1%).
Density per square mile: c. 29.1.
President: William V. S. Tubman.
Capital city (census 1958): Monrovia, capital and chief port).
Currency: Liberian dollar.
Languages: English (official), native languages.
Religion: Protestant Christian (official); Catholic, Pagan.

STATUS IN THE WORLD TODAY

Liberia has never been a colonial possession and consequently has not shared in the wave of nationalism which has swept Africa since 1945. Created as a result of the efforts of the American Colonization Society to settle ex-slaves in West Africa, it celebrated the centennial of its independence in 1947. With this historical background, it has had extremely close relations, both diplomatic and economic, with the United States. Because of the country's strategic importance, American troops were stationed there in World War II. Its government is modeled on the American system and the Liberian dollar is at par with the American dollar.

During the past 30 years, Liberia has made remarkable economic progress, but even with outside help has been unable thus far to produce sufficient revenue to create much-needed educational and public health facilities. Illiteracy is still high among tribal groups in the interior, and they have little share in the governing of the country which is largely in the hands of the 15,000 Americo-Liberians, descendants of the slaves who were freed on its shores. Revenue from the Firestone Rubber Company's plantation concessions has helped the government to escape from its chronic budget deficits. Further development of natural resources has, in some instances, been hindered by the sparse population of many parts of the interior which have only four or fewer persons per square mile.

GOVERNMENT. The government is modeled after that of the United States. The President and Vice-President are popularly elected for eight years. The 31-member House of Representatives is elected for four years and the ten-member Senate for six years. Suffrage is extended only to landowners over 21 who are of Negro blood, but a 1946 constitutional amendment provided for the seating in the House of an aborigine from each province in the hinterland. Women have the franchise. Liberia's army of about 4,000 men is organized on a militia basis.

SOCIAL AND ECONOMIC CONDITIONS. The English-speaking descendants of U.S. Negroes, known as Americo-Liberians, are the intellectual and ruling class. The aborigines, virtually all uncivilized, are divided into some 28 tribes speaking different dialects. Some are Moslems or pagans. The Christian population includes Anglicans, Methodists, Catholics, Baptists, and Presbyterians.

Chief exports in 1957 were rubber (65%), iron ore (20%), and diamonds (6%). Leading customers were the United States (74%), the Netherlands (5%), and West

Germany (10%); leading suppliers, the United States (56%), West Germany (12%), and Britain (9%).

Libya (Kingdom)

Area: 679,358 square miles.
 Population (census 1958): 1,153,000 (Berber, with Arab admixture, 93%; Italian, 5%; Jewish, 2%).
 Density per square mile: 1.7.
 Ruler: King Idris I.
 Prime Minister: Abdul Majid Kobar.
 Principal cities (census 1959): Tripoli, 172,000 (joint capital); Benohazi, 70,533 (joint capital).
 Monetary unit: Libyan pound (£L).
 Languages: Arabic, Italian.
 Religions: Moslem (93%), Christian (5%), Jewish (2%).

STATUS IN THE WORLD TODAY

The present government of Libya is comparatively friendly toward the United States, and under a 1954 agreement we maintain a large air base at Wheelus Field. More than one-quarter of the national income is derived in one form or another from the United States, and an American oil firm started commercial production from wells it had drilled early in 1959. The country, however, is the scene of considerable Soviet and Egyptian activity, and part of the population is impressed by Soviet offers to build roads, ports, and hospitals without political conditions attached. The western part of the country leans toward the West; the eastern part is more oriented toward the Middle East, with some pro-Nasser sentiment.

HISTORY AND GOVERNMENT. Libya, stretching along the northern coast of Africa between Tunisia and Egypt, was a part of the Turkish dominions from the sixteenth century until 1911. Following the outbreak of hostilities between Italy and Turkey in that year, Italian troops occupied Tripoli; Italian sovereignty was recognized in 1912 by the Treaty of Ouchy.

Libya was the scene of much desert fighting during World War II. After the fall of Tripoli on Jan. 23, 1943, it came under Allied administration. The U.N. General Assembly voted on Nov. 21, 1949, that Libya should become independent by 1952.

Following the adoption by the constituent assembly of a Constitution, the independence of the country was proclaimed by King Idris I on Dec. 24, 1951.

Under the Constitution, Libya is a hereditary monarchy with a federal form of government. Tripolitania, Cyrenaica, and the Fezzan are the constituent provinces. It has a bicameral Parliament consisting of a Senate of 24 members, half named

by the King and half by the three provincial legislatures, and a House of representatives elected on the basis of one deputy for every 20,000 inhabitants. Tripolitania has 35 members, Cyrenaica and the Fezzan 5. The Cabinet, headed by the Prime Minister, is responsible to the federal Parliament.

The ruler, King Idris I, hereditary head of the powerful Senussi sect in Cyrenaica, was born in 1890.

SOCIAL AND ECONOMIC CONDITIONS. Tripolitania, with one-sixth the area, has 68 per cent of the population; Cyrenaica has 27 per cent and the Fezzan 5 per cent. About 75 per cent of the population is nomadic, and about half of that is nomadic or semi-nomadic.

Animal husbandry is the basic economic activity, and there are considerable numbers of cattle, sheep, camels, and goats. Agriculture is possible only in the Mediterranean coastal region, where citrus olives, citrus fruit, wheat, and barley are grown, and in oases in the Fezzan elsewhere; here the principal products are dates. Sponge and tunny fisheries are carried on off the coast.

Chief exports are peanuts, scrap metal, and esparto. In 1958, Italy was the largest customer (37%) and supplier (22.3%).

Liechtenstein (Principality)

Area: 61 square miles.
 Population (est. 1958): 15,361 (nearly all German).
 Density per square mile: 251.8.
 Ruler: Prince Franz Joseph II.
 Chief of Government: Alexander Frick.
 Principal city (est. 1958): Vaduz, 3,000 (capital).
 Monetary unit: Swiss franc.
 Language: German.
 Religion: Roman Catholic.

HISTORY AND GOVERNMENT. Liechtenstein lies on the east bank of the Rhine, just south of Lake Constance, between Austria and Switzerland. It has maintained its army in 1868 and has managed to stay neutral and undamaged in all European wars since that date.

Founded in 1719, Liechtenstein became independent in 1866. Franz Joseph II, the reigning Prince, was born in 1906 and succeeded his great uncle, Franz I, in 1929. In 1943 he married Countess Gina W. of Austria.

The Constitution of 1921 provided for a legislature, the *Landtag*, of 15 members elected by direct, universal suffrage. Liechtenstein adopted Swiss currency in 1921 and has been part of the Swiss Customs Union since 1924. Its foreign trade statistics are included in those of Switzerland, which also administers the country's telegraph and postal service.

at, wine, and fruit are the chief products. There are small manufactures of leather, and pottery.

enstein's area includes low valley and upland peaks—Falkais at 8,401 and Naafkopf, 8,432 feet. The chief product is marble.

Lithuania

Area: 25,174 square miles.
Population (1959): 2,713,000 (1940: 2,713,000); Lithuanian, 81% [1950: 55%]; German, Polish, 3%; Russian, 2%; others,

Density per square mile: 107.5.

Principal cities (1959): Vilnius (Wilno), (capital); Kaunas, 214,000 (river

Language: Lithuanian.

Religions: Roman Catholic, 80%; Lutheran, 5.5%; others, 14.5%.

HISTORY AND GOVERNMENT. Southernmost of the three Baltic states, Lithuania in middle ages was a grand duchy and Poland through royal marriage. and Lithuanians merged forces to the Teutonic Knights of Germany in 1410 and extended their power far into Russian territory. In 1795, after, following the third partition of Poland, Lithuania fell into Russian hands and did not gain its independence until toward the end of World War I.

After the republic was occupied by the Germans in 1939 and annexed outright the following year. From 1940 to 1944 it was ruled by German troops and then was taken by the Soviet Union. Western nations, including the United States, have recognized the Russian annexation.

Luxembourg (Grand Duchy)

Area: 999 square miles.
Population (est. 1958): 320,000 (Luxembourg, French, German).

Density per square mile: 320.3.

Monarch: Grand Duchess Charlotte.

Minister: Pierre Werner.

Principal city (est. 1958): Luxembourg, (capital, iron and steel).

Currency unit: Luxembourg franc.

Languages: Luxembourgian, French,

Religion: Mainly Roman Catholic.

STATUS IN THE WORLD TODAY

Luxembourg, traditionally neutral, is committed to Free Europe. Although military strength is negligible, it joined the North Atlantic Pact in 1949, after it abolished its unarmed neutrality and made military service compulsory with Belgium and the Netherlands, a member of the Benelux Customs

Union, one of the five great trading areas of the world. Its foreign policy has been traditionally friendly to the United States.

HISTORY AND GOVERNMENT. Sigefroi, Count of Ardennes, an offspring of Charlemagne, was Luxembourg's first sovereign ruler. In 1060 the country came under the rule of the House of Luxembourg. From the 15th to the 18th centuries, Spain and Austria held it in turn. The Congress of Vienna in 1815 made it a Grand Duchy and gave it to William I, King of the Netherlands. In 1839 the Treaty of London ceded the western part of Luxembourg to Belgium. Luxembourg's legislature consists of an Upper Chamber appointed by the sovereign and of a Chamber of Deputies of 52 members elected for 6 years. Half the Chamber of Deputies is elected every 3 years.

ECONOMIC CONDITIONS. Although the soil is not very fertile, agriculture is prosperous. Principal crops are potatoes, oats, wheat, rye, and grapes.

The mining and metallurgical industries, based on iron ore found in the south, are the most important.

By a customs union between Belgium and Luxembourg which came into force on May 1, 1922, to last for 50 years, customs frontiers between the two countries were abolished. On Jan. 1, 1948, an economic union with Belgium and the Netherlands (Benelux) came into existence. Luxembourg's foreign-trade figures are included in those of Belgium and no separate statistics are available; exports consist chiefly of iron and steel products.

Luxembourg's prosperity depends largely on its large iron ore deposits.

Maldives Islands (Sultanate)

Area: c. 115 square miles.

Population (est. 1958): 82,000.

Density per square mile: c. 713.

Sultan: Amir Mohammed Farid Didi.

Prime Minister: Ibrahim Nasir.

Principal city (est.): Malé, 8,000 (capital).

Monetary unit: Rupee.

Languages: Sinhalese (dialect), Arabic.

Religion: Moslem.

HISTORY AND GOVERNMENT. The Maldives Islands, about 400 miles to the southwest of Ceylon in the Indian Ocean, were first visited by the Portuguese in the sixteenth century. They came under British protection in 1887 and were a dependency of the colony of Ceylon until 1948, when relations with Britain were formalized in a treaty which left domestic affairs in the hands of the islanders. Reactivation of a British airfield was announced Jan. 3, 1957.

For centuries a sultanate, the islands adopted a republican form of government in 1952, but the sultanate was restored in Feb., 1954, and is elective, not hereditary. The Sultan is elected by the parliament. The latter consists of a Senate of 80 members and a Lower House of 46 members elected by popular vote. All men and women over 18 have the franchise.

The people are great traders and fishermen. Besides fishing, coir making is the chief local industry. Exports include coir, coconuts, copra, millet, and fruit.

The islands consist of 12 coral atolls with about 2,000 small islands, of which about 300 are inhabited.

Mexico (Republic) (Estados Unidos Mexicanos)

Area: 760,373 square miles.

Population (est. 1959): 33,304,000 (mestizo, 55%; Indian, 29%; white, 15%; others, 1%).

Density per square mile: 43.8.

President: Adolfo López Mateos.

Principal cities (est. 1958): Mexico City, 3,448,218 (capital); (census 1950) Guadalajara, 444,139 (manufacturing); Monterrey, 426,573 (metallic industries); Puebla, 211,331 (cotton textiles); Mérida, 168,767 (sisal); San Luis Potosí, 150,834 (mineral smelting).

Monetary unit: Peso.

Languages (1940): Spanish, 96.4%; Indian, 3.6%.

Religion: Predominantly Roman Cath.

STATUS IN THE WORLD TODAY

Mexico has had one of the most stable governments in Latin America in the last two decades, and democratic institutions have become stronger. Three successive presidential elections were held in 1948, 1952 and 1958 without any major incident or attempt to overthrow the government, despite the fact that the elections were "managed" by the strongly entrenched government party, Partido Revolucionario Institucional. But freedom of speech, press, and thought are generally respected.

The country has made great social, economic, and political advances since its modern revolution began in 1910. Mexico's educational system and social-service institutions have expanded rapidly, particularly in the last 20 years. The agrarian reform, virtually completed under the 1934-40 administration of President Lázaro Cárdenas, created a large group of small farmers, many with personal title to their lands, others members of "ejidos" or cooperative farms. The growth of this class meant creation of a much larger internal market for manufactured goods and paved the way for industrialization. Ex-

tensive foreign investment, particularly from the United States, has aided industrialization. Automobile assembly plants, electrical-products factories, clothing-manufacturing plants are among the new foreign-financed establishments. Previous existing industries such as sugar and textiles have been expanded.

HISTORY. Mexico's early history shrouded in mystery. At least two civilizations—the Mayas and later the Toltecs—preceded the wealthy Aztec empire, conquered in 1519-21 by the Spanish. In 1519, Hernando Cortez, Spain ruled for the next 300 years until 1810 (the date was September 16, and is now celebrated as Independence Day), when the Mexicans first revolted. They continued the struggle and finally won independence in 1821.

Turbulent years followed. From 1821 to 1877, there were two Emperors, several dictators and enough Presidents and provisional executives to make a new government on the average of every nine months. Mexico lost Texas (1836), and after defeat in the war with the United States (1846-48) it lost the area comprising the present states of California, Nevada, and most of Arizona and New Mexico, and part of Wyoming and Colorado.

In 1855 the Indian patriot Benito Juárez began a series of liberal reforms, including the disestablishment of the Catholic Church, which had acquired vast property. A subsequent civil war was interrupted by the French invasion of Mexico (1861-67), crowning of Maximilian of Austria as emperor (1864), and then his overthrow and execution by forces under Juárez, who again became President in 1867.

The years after the fall of the dictator Porfirio Díaz (1877-80 and 1884-1911) were marked by bloody political-military struggles and trouble with the U.S. culminating in the punitive expedition into northern Mexico (1916-17) in unsuccessful pursuit of the bandit-politician Pancho Villa. There was a continuous succession of weak presidents and of internal strife until 1917, when a new congress was elected and a liberal constitution adopted. Since a period of civil war in 1920, Mexico has enjoyed a period of gradual agricultural, political and social reforms. Relations with the United States were again disturbed in 1938 when all foreign oil wells were expropriated. Agreement on compensation was finally reached in 1941.

GOVERNMENT. The President, popularly elected for six years and ineligible to succeed himself, governs with a Cabinet of ministers. The Federal Congress has two houses—the 162-member Chamber of Deputies, elected for three years (one for 150,000 population) and the 60-m-

e, elected for six years. All married citizens at least 18, and all single citizens at least 21 are eligible to vote. n received the right to vote in 1953. n of the 29 states has considerable omy, with a popularly elected Gov- legislature and local judiciary. The ent appoints the Governors of the federal territories, and the governing of the Federal District.

OMIC CONDITIONS. *Agriculture.* ive agricultural methods are steadily way to modern practices. More than 000 acres are under cultivation. The an peninsula, at the southern end of ulf of Mexico, raises more than half world supply of sisal hemp.

kraising is important on non-arable Mexico's inventory of livestock in cluded an estimated 19,400,000 cat- 880,000 sheep, and 8,600,000 hogs.

ry. The leading industrial products tton cloth and thread, beer, sugar, and steel.

f exports in 1958 were cotton (24%), 11%), lead (6%), copper (6%), nc (5%). The U.S. took 77% of the s and supplied 69% of the imports. eading customers were Japan, h, and West Germany. Leading im- cluded machinery, vehicles and d steel products.

AL FEATURES AND RESOURCES. is a great, high plateau, open to the with mountain chains on east and nd with ocean-front lowlands lying e of them. It has two big spears— insula of Lower California, which is ainous, and the Yucatán peninsula, ls mostly a low plain. The eastern ains are marked by high volcanoes. ls. Mexico is one of the richest countries in the world. It out- all other countries in silver produc- ther minerals are gold, lead, copper, ntimony, tin, coal, and iron ore.

of the Mexican mining properties reign-owned, and the industry is ng in relative importance. The oil- ying along the east coast, were y the government in 1938, but e foreign owners were indemnified.

. Mexico's forests are of consid- importance; they include pine, oak, hogany, red and white cedar, and era. Resins, turpentine, and vege- yax are also produced. Yucatán pro- nearly all of the world's chicle, the f the sapodilla tree, used as the base wing gum.

Density per square mile: 32,049.5.
Ruler: Prince Rainier III.
Principal and only cities (census 1951):
Monaco, 1,860; La Condamine, 9,858; Monte
Carlo, 8,484.
Monetary unit: French franc.
Language: French.
Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

This world-famous gambling resort has been undergoing a domestic political crisis. In February, 1958, the National Council of Monaco passed unanimously a motion calling for constitutional reforms. Prince Rainier rejected the motion and declared that he would not tolerate attempts to curtail his powers. This warning was translated into action on January 29, 1959, when the Prince suspended the Constitution of 1911, dissolved the National Council and banned all public meetings. The move took place following a special session of the National Council which ended without voting the principality's budget. Prince Rainier has promised reforms of his own.

The special significance attached to the birth of descendants to Prince Rainier stems from a clause in the Treaty of July 17, 1919, between France and Monaco stipulating that in the event of vacancy of the Crown, the Monegasque territory would become an autonomous state under a French protectorate. In this eventuality, the Monegasques would have to forego their privilege of not paying taxes.

HISTORY AND GOVERNMENT. A tiny, hilly wedge driven into the French Mediterranean coast nine miles east of Nice, Monaco is a little land of pleasure with a tourist business that runs as high as 1,500,000 visitors a year. Monaco had popular gaming tables as early as 1856. Five years later, a 50-year concession to operate the games was granted to François Blanc, of Bad Homburg. This concession passed into the hands of a private company in 1898.

The Phoenicians, and after them the Greeks, had a temple on the Monacan headland honoring Hercules. From *Monoi-kos*, the Greek surname for this mythological strong man, the principality took its name. After being independent for 800 years, Monaco was annexed to France in 1793 by the French Revolutionists and was placed under Sardinia's protection in 1815. In 1861, it went under French guardianship but continued to be an independent country.

Prince Albert of Monaco gave the principality a Constitution in 1911, creating a National Council of eighteen members popularly elected for four years. The government is under a ministry, acting on the

Monaco (Principality)

0.606 square mile (375 acres).
Population (census 1956): 20,422.

Prince's authority. The ruler, Prince Rainier III, born May 31, 1923, succeeded his grandfather, Louis II, on the latter's death, May 9, 1949. Rainier was married April 19, 1956, to Grace Kelly, U.S. actress. A daughter, Princess Caroline Louise Marguerite, was born Jan. 23, 1957, and a son, Prince Albert Louis Pierre on March 14, 1958.

Mongolian People's Republic (Outer Mongolia)

Area: 591,119 square miles.
Population (est. 1959): 909,600 (Mongol, except for about 100,000 Russians and 50,000 Chinese).

Density per square mile: 1.5.
Chairman of Presidium: Zh. Sambu.
Prime Minister: Y. Tse Den-bal.
Principal city (est. 1957): Ulan Bator, 120,000 (capital).

Monetary unit: Tugherik.
Languages: Mongolian, Russian.
Religion: Lama-Buddhist.

STATUS IN THE WORLD TODAY

The Mongolian People's Republic is a buffer state between China and Russia. It has been a Soviet satellite since 1924, although the Communists have insisted that it is a sovereign state and have tried, unsuccessfully, to obtain U.N. membership for it. Closed off from the outside world for many years, it now offers the shortest rail route between Moscow and Peiping, and its capital, Ulan Bator, is a stop on the Moscow-Peiping air line. In 1958 it signed its first economic aid pact with Red China and is now receiving assistance from that country as well as from the U.S.S.R.

HISTORY AND GOVERNMENT. The Mongolian People's Republic, known also as Outer Mongolia, is a Russian satellite that measures more than twice the area of Texas. It contains the original homeland of the historic Mongols, whose power reached its zenith during the thirteenth century under Kublai Khan. The area accepted Manchu rule in 1689, but after the Chinese Revolution of 1911 and the fall of the Manchus in 1912, the northern Mongol princes expelled the Chinese officials and declared independence under the Khutuktu or "Living Buddha." In 1921, Soviet troops entered the country and facilitated the establishment of a republic by Mongolian revolutionaries in 1924 after the death of the last Living Buddha. China, meanwhile, continued to claim Outer Mongolia but was unable to back the claim with any strength. Under the Chinese-Russian Treaty of 1945, China

agreed to give up Outer Mongolia, which after a rigged plebiscite, became nominally independent.

The government of the republic is strikingly similar to the Soviet system. Great Hural or Huruldan (parliament) elected by universal suffrage, meets at least once in three years and picks members to act as an executive committee—the Little Hural—which in turn appoints a presidium of seven members as a interim body. A Cabinet of ten ministers is appointed by the Little Hural government of the country.

ECONOMIC CONDITIONS. The country is largely pastoral. There are few areas suitable for crop growing, but some rye, and wheat are produced. Most of the people are essentially nomadic or seminomadic; flocks and herds remain the main source of wealth.

There are a few industrial enterprises. All land, natural resources, factories, and hay-making stations and public utilities are nationalized.

Foreign trade, a state monopoly, is carried on mainly with the Soviet Union, also with Communist China. The principal exports are livestock, wool, hides, animal hair, meats, and furs.

NATURAL FEATURES AND RESOURCES. The productive regions of Outer Mongolia—a tableland ranging from 3,000 to 10,000 feet in elevation—are in the north, and is well drained by numerous rivers including the Kerulen, Tola, Orkhon, Selenga.

Reserves of 500,000,000 tons of coal are said to exist in the Nalaikha field near Ulan Bator. Some gold is mined. Deposits of antimony, copper, iron ore, graphite, mercury, sulfur, and silver.

Morocco (Kingdom) (Maroc)

Area: 174,553 square miles.
Population (est. 1958): 10,330,000.
Density per square mile: 59.2.
Ruler: King Mohammed V.
Prime Minister: Y. Tse Den-bal.

Principal cities (census 1951-52): Casablanca, 682,388 (chief seaport); Marrakech, 215,312 (trading center); Fez, 150,000 (commercial center); Rabat, 100,000 (French administrative center); Tangier (census 1950), 80,732 (Spanish administrative center).

Monetary unit: Dirham.
Languages: Arabic, French, Spanish.
Religions: Chiefly Moslem.

STATUS IN THE WORLD TODAY

Morocco has proclaimed a policy of "nondependence," or neutrality, in international affairs, but the trend is actually toward the left. The new kingdom permitted

Union to establish an embassy in 1958, received arms from Czechoslovakia, and, after a visit from the Iraqi Minister, joined the Arab League. It demanded the evacuation of all troops from its soil, including the 15,000 American bomber bases which had been established in 1950 under an agreement with France. The United States has in principle to turn the bases over to Morocco to strengthen the hands of moderates against the extremists, but no date has been set for any evacuation. The cost of personnel at these bases is estimated to contribute some \$30 million annually to the Moroccan economy, and in addition the country has received from the United States \$20 million in 1958, \$30 million in 1959, and \$40 million in 1960. It still has a trade deficit of about \$100 million. Politically, the country is experiencing some unrest due to the split of the Istiqlal (Independence) party into warring factions, right-wing and left-wing. A split between the King and the ruling government resulted in his taking the premiership nine days before the national-wide elections scheduled for September 1960. He said the new phase would be a constitutional monarchy based on democratic principles, and promised a constitution by 1962.

MOROCCO. Morocco, about the size of California, is just south of Spain across the Strait of Gibraltar and looks out on the Atlantic from the northwest shoulder of Africa. It was once the home of the Phoenicians, who helped the Arabs invade in A.D. 711 and then revolted against them and gradually won control of large parts of Spain for a time after 739.

The country was ruled successively by native dynasties and maintained friendly commercial relations with Europe, during the 17th and 18th centuries. It was the headquarters of the Barbary Sallî pirates. In the 19th century, it was with the French and Spanish befriended. Finally, in 1904, France and Spain divided Morocco into zones of French and Spanish influence, and these were established as protectorates in 1912.

Meanwhile, Morocco had become the object of big-power rivalry, which almost led to a European war in 1905 when Germany attempted to gain a foothold in the rich Moroccan country. By terms of the Algeciras Conference (1906), Morocco was internationalized economically and France's privilege was limited. War again seemed imminent in 1911, when Germany dispatched a fleet to Agadir in an evident attempt to intimidate France. Again the dispute was settled, however, and this time Germany recognized France's right to establish a protectorate over Morocco.

The Tangier Statute, concluded by Britain, France and Spain in 1923, created an international zone at the port of Tangier, permanently neutralized and demilitarized. In World War II, Spain occupied the zone, ostensibly to ensure order, but was forced to withdraw in 1945, and the international rule was re-established.

Sultan Mohammed V was deposed by the French in August, 1953, and replaced by his uncle, but nationalist agitation forced his return in November, 1955.

France recognized the independence and sovereignty of Morocco on March 2, 1956. Spain followed on April 7, 1956. The Tangier international zone was abolished by a declaration signed October 29, 1956. Morocco was admitted to the U.N. November 12, 1956.

GOVERNMENT. In May, 1958 King Mohammed V promulgated a royal charter providing for the establishment of a Deliberative Assembly which is to share with him the exercise of legislative power. The charter also stresses the principle of individual and collective responsibility of Cabinet Ministers to the monarch, and provides for elections for rural and municipal councils which, in turn, elect representatives to the Deliberative Assembly.

ECONOMIC CONDITIONS. The natives are Berbers, roughly divided by customs and way of life into three groups—the Riff group along the coast, the central, or Berber, group in the mid-Atlas Mountains, and the southern, or Cleuh, in the high Atlas and the Sus. There is a large Jewish population. Most of the Europeans live in the cities.

Morocco is essentially agricultural. Corn, beans, peas, hemp, wheat, barley, sorghum, citrus fruits, olives, and dates also are raised. In 1955 there were 15,400,000 sheep and 2,466,000 cattle.

In the former Spanish zone, agriculture is largely undeveloped but it has potential importance. Barley, wheat, maize and sorghum crops are the most important.

Manufacturing industries introduced by Europeans, mostly small, produce chemicals, flour, leather, stone, beverages and textiles. Native industries include carpet weaving and making Turkish slippers.

In 1958 chief exports were phosphate, barley, olive oil, and citrus fruit. France took 50 per cent of the exports and supplied 44 per cent of the imports, which included sugar, vehicles, petroleum products, cotton cloth, and tea. A large proportion of the trade was carried on with Spain. Major exports are iron ore, fish, and grain; imports include flour, sugar, tea, wine, and textiles.

Casablanca, which handles 80 per cent of the French zone trade, has perhaps the world's largest artificial port.

Exploitation of French Morocco's almost

inexhaustible deposits of phosphate is a state monopoly. Other major minerals are coal, cobalt, iron ore, manganese ore, molybdenum, tin, zinc, and lead. Iron ore is the chief mineral of the Spanish zone; others are antimony and manganese.

NATURAL FEATURES. On the Atlantic coast there is a fertile plain; the Mediterranean coast is mountainous, making most of the Spanish zone a rugged area. The Atlas Mountains, running northeastward from the south to the Algerian frontier, average 11,000 feet in elevation.

Nepal (Kingdom)

Area: 59,362 square miles.

Population (estimated 1959): 9,044,000 (Gurkha [predominant], Magar, Gurung, Bhotia [Tibetan], Newar).

Density per square mile: 166.4.

Ruler: Mahendra Bir Bikram.

Prime Minister: B. P. Koirala.

Principal city and capital: Katmandu (estimated population, 108,800).

Monetary unit: Nepalese rupee.

Languages: Parbatia, Gubhajius, Tibetan.

Religions: Hinduist, Buddhist.

STATUS IN THE WORLD TODAY

Nepal, dependent as it is upon other nations for access to the rest of the world, follows the neutralist foreign policy of India, which is committed by treaty to go to Nepal's defense should it be attacked from any quarter. Formerly known as the "forbidden kingdom," which few foreigners could enter, the country has now gone so far in the other direction as to open a tourist bureau. Although concerned and sad over the Communist Chinese occupation of Tibet, Nepal follows the Indian policy of trying to maintain friendly relations with Red China because of its geographical position.

The country is getting economic assistance from the United States, India, Red China, and the U.S.S.R. The U.S. is also developing the nation's nine airports.

The Nepalese do not particularly like their dependence on India, but, except through China, they have no other access to the outside world. And Nehru, although yielding without any measurable opposition to Peiping's occupation of Tibet, has stated that India's true borders are the Himalaya Mountains on the north of Nepal, and that India was "not going to tolerate any person coming over that barrier."

HISTORY AND GOVERNMENT. A landlocked country about the size of Iowa, lying between the Republic of India and

Tibet, Nepal contains Mt. Everest, tallest measured mountain in the world.

The Gurkhas invaded Nepal from India in 1768 and conquered it. A commerce treaty was signed with Britain in 1816 and in 1816, after more than a year of hostilities, the Nepalese agreed to let British residents to live in Katmandu, capital. In 1923 Britain recognized the absolute independence of Nepal. King Tribhuvan was deposed on Nov. 7, 1950, was returned to the throne with Indian assistance on Feb. 15, 1951. On his death Mar. 13, 1955, his son Mahendra became ruler. Nepal was admitted to the U.N. in 1955.

The new Constitution promulgated by King Mahendra in February, 1959, provided for a constitutional monarchy with a bicameral parliament and a Cabinet responsible to the Lower House. The Upper House has 36 members, half of whom are elected by the Lower House and the other half appointed by the King. The Lower House has 109 members elected under Nepal's first electoral law, dated June 3, 1958. Candidates must be 25 years of age, and Nepalese of 21 years and over are granted voting rights. In the elections held February-April, 1959, the Nepali Congress Party, identified with the revolutionary movement of 1950, won 74 seats in the Lower House. On May 27, 1959 the cabinet was sworn in with B. P. Koirala, President of the Nepali Congress Party, as Premier.

ECONOMIC CONDITIONS. Cultivated and irrigated where possible, the main crops of Nepal grow rice, wheat, pulse, fruit, vegetables, spices, sugar cane, and potatoes. A few sheep and cattle are grazed. Manufacturing is limited to native handicrafts, but jute and textile mills are being established. Trade with India and Pakistan passes through frontier stations; there are two mountain trade routes to Tibet.

Main exports include hides, skins, opium, gums, resins, dyes, jute, wheat, pulse, spices, and timber. Two railroads connect Nepal for short distances—one from Kathmandu, India, to Amlekhganj, the other from Kathmandu to Bijulapura.

NATURAL FEATURES AND RESOURCES. Along its southern border, Nepal has a narrow strip of level land which is partly forested and partly cultivated. North of that is the steep slope of the Himalayan Range, including Mt. Everest (29,028 ft.), which was climbed for the first time in 1953, and many peaks higher than 20,000 feet. Mineral resources, nearly all unexploited, include lithium, copper, zinc, lead, sulfur, marble, and iron. Southern Nepal has valuable forests which yield gum, timber, resin, and hemp. Hemp plants grow wild.

Netherlands (Kingdom)

Koninkrijk der Nederlanden)

12,482 square miles.*

Population (est. 1959): 11,346,000 (practically all Dutch).

Density per square mile: 909.

Monarch: Queen Juliana.

Prime Minister: Jan Eduard de Quay.

Principal cities (est. 1959): Amsterdam, (capital, financial center); Rotterdam, 731,848 (chief port); The Hague, (seat of government); Utrecht, (railway center); Haarlem, 169, (tulip center); Eindhoven, 164,588 (industrial center).

Administrative unit: Guider.

Language: Dutch.

Religions (census 1947): Roman Catholic, Dutch Reformed, 31.0%; other Protestant, 13.3%; Jewish, 0.2%; others and non-religious, 17.0%.

Shipping waterways and bodies of water larger than 100 acres.

STATUS IN THE WORLD TODAY

Foreign policy of the Netherlands is firmly and willingly in line with the Atlantic Pact, and the country is one of the firmest allies of the United States in Europe or elsewhere. It occupies a position in the world economy far out of proportion to its size as a transshipment point for trade between Europe and from the continent. It was a recipient of American aid after both World Wars.

The Netherlands lost most of its colonial empire in 1949, when its East Indies possessions achieved independence. It is still involved in a dispute with its former colony over the ownership of West New Guinea (see *Indonesia*). In the Western Hemisphere it owns a number of islands including the Netherlands West Indies, Surinam (also known as Dutch Guiana) on the South American continent.

History and Government. Julius Caesar found the low-lying Netherlands inhabited by Germanic tribes, the Nervii, and Batavi. The Batavi on the Roman frontier did not submit to Rome's rule unconditionally, and then only as allies. A part of the Roman Empire's empire in the eighth and ninth centuries A.D., the area later passed into the hands of Burgundy and the Austrians, and finally in the sixteenth century came under Spanish rule. Philip II of Spain suppressed political liberties and the growing Protestant movement in the Netherlands, a revolt led by William of Orange broke out in 1568. The Union of Utrecht in 1579, the northern provinces became the Republic of the United Netherlands.

The Dutch East India Company was chartered in 1602, and by the end of the

seventeenth century Holland was one of the great sea and colonial powers of Europe.

The nation's independence was not completely established until after the Thirty Years' War, after which the country's rise as a commercial and maritime power began. In 1814 all the provinces of Holland and Belgium were merged into one kingdom, but in 1830 the southern provinces broke away to form the Kingdom of Belgium. A liberal constitution was adopted by the Netherlands in 1848. In spite of its neutrality in World War II the Netherlands was invaded by the Nazis in May, 1940, and the East Indies were later taken by the Japanese. The nation was liberated in May, 1945. In 1948, after a reign of fifty years, Queen Wilhelmina resigned and was succeeded by her daughter Juliana.

The Netherlands is a constitutional monarchy with a bicameral legislature. The Parliament consists of an Upper Chamber of 50 members elected for 6 years by representative bodies of the provinces, and of a Lower Chamber of 150 members elected by popular vote for 4 years. The Upper Chamber cannot introduce or amend bills, only approve or reject them. Members of Parliament are not eligible for Cabinet posts.

Ruler. Queen Juliana, who was born April 30, 1909, was married on Jan. 7, 1937, to Prince Bernhard of Lippe-Biesterfeld (born in 1911). They have four daughters: Beatrix, heiress apparent (born Jan. 31, 1938); Irene (born 1939); Margriet Francisca (born 1943); and Maria Christina (born 1947).

Economic Conditions. *Agriculture.* Dutch farms are characteristically small, with only a few larger than 250 acres. Dairying is more important than crop growing; production of cheese, milk, butter and eggs is under state control.

In 1958 there were 3,197,000 cattle, 2,647,000 hogs, 542,000 sheep, and 194,000 horses. Large quantities of vegetables and fruits are raised for export.

Almost as important as the dairy industry is the raising of tulip, hyacinth, and other flower bulbs in the area around Haarlem.

Industry. The Netherlands is a highly industrialized nation, utilizing both overseas raw materials and domestic agricultural products. Leading industries are textiles, clothing, shipbuilding, shoes, food, and building materials.

The Netherlands ranks high among the world's shipbuilding nations; also pig iron and steel are important. Amsterdam is one of the world's diamond-cutting centers.

Trade. Principal customers in 1958 were West Germany (19%), Belgium (15%),

Britain (12%), the U.S. and Canada (6%), and France (5%). Leading suppliers were West Germany (19%), Belgium (18%), the U.S. and Canada (14%), Britain (8%), and France (3%). The chief exports were petroleum and coal-tar products (10%), dairy products and eggs (10%), electrical machinery and apparatus (6%), and fabrics and clothing (6%). Leading imports were machinery, iron and steel and manufactures, petroleum and products, cereals and flour, and wood and manufactures.

Communications. The Dutch merchant marine is the seventh largest fleet in the world. An extensive network of rivers expanded by many canals has led to extensive development of inland shipping.

NATURAL FEATURES AND RESOURCES. Part of the great plain of north and west Europe, the Netherlands has maximum dimensions of 190 by 160 miles and is low and flat except in Limburg in the south-east, where some hills rise to 300 feet. About half the country's area is below sea level, making the famous Dutch dikes a requisite to the use of much land. Reclamation of land from the sea through dikes has continued through recent times.

All drainage reaches the North Sea, and the principal rivers—Rhine, Maas (Meuse), and Schelde—have their sources outside the country. The Rhine is the most heavily used waterway in Europe.

Netherlands minerals are few. The only important ones are coal, crude petroleum, and salt. There also are peat swamps and about 600,000 acres of forest.

NETHERLANDS OVERSEAS TERRITORIES

NETHERLANDS ANTILLES—Status: Part of the United Kingdom of the Netherlands.

Area: 371 square miles.
Population (est. 1959): 193,000.
Capital: Willemstad (est. 1956: 46,899).
Governor: F. E. J. van der Valk (acting).
Prime Minister: Ephraim Jonckheer.
Foreign trade (1958), exports, 1,523,000,-000 florins; imports, 1,693,000,000 florins.
Chief export: petroleum products (99%).
Agricultural products: aloes, beans, corn.
Manufactures: refined petroleum, straw hats.

Mineral products: lime phosphate, salt.

This comprises two groups of Caribbean islands 500 miles apart; one, about 40 miles off the Venezuelan coast, consists of Curaçao (173 sq. mi.), Bonaire (95 sq. mi.), and Aruba (69 sq. mi.); the other, lying to the northeast, consists of 3 small islands with a total area of 29 square miles. The Dutch acquired the island of Curaçao from Spain in 1634.

The Governor is assisted by a local Legislature and Cabinet. The area has complete autonomy in domestic affairs.

The economy of the Netherlands Antilles

is based almost entirely on the refinery at Curaçao and Aruba of crude petroleum which comes chiefly from the adjacent Maracaibo fields in Venezuela.

SURINAM (Dutch Guiana)—Status: Part of the United Kingdom of the Netherlands.

Area: 55,144 square miles.
Population (est. 1958): 241,000.*
Capital: Paramaribo (pop. 1958: 100,000).
Governor: J. van Tilburg.
Prime Minister: J. H. E. Ferrier.
Foreign trade (1958): exports, 61,172 florins (76% to the U.S.); imports 71,000 florins (32% from the U.S.). Chief export: bauxite (80%).
Agricultural products: rice (1958: 8 metric tons), sugar, coffee.
Minerals (1958): bauxite, 2,988,000 metric tons; gold, 4,244 troy oz.
Forest products: balata (1958: 122 metric tons), timber.

* Including aborigines, numbering about 26,000.

Surinam lies in northeastern South America between British and French Guiana. It was received by the Dutch from England at the Peace of Breda (1667) in exchange for New York and at that time included British Guiana, which was ceded by England in 1803 and formally ceded after the Napoleonic Wars.

The Governor of Surinam (appointed by the Crown) is assisted by a local Legislature and Cabinet, which have responsibility in domestic affairs.

Mining is the most important activity and only about 65,000 acres are devoted to agriculture. The largest bauxite mines are owned by Aluminum Companies of America subsidiaries.

From its settled coastal plain, Surinam runs back to a virtually unexplored mountain and jungle area.

NETHERLANDS NEW GUINEA—Status: Part of the United Kingdom of the Netherlands.

Area: 180,618 square miles.
Population (est. 1958): 700,000.
Capital: Hollandia (pop. 1958: 16,000).
Governor: Jan van Baal.
Agricultural products: sago, coconut, sugar cane, sweet potatoes.
Minerals: petroleum, nickel, chromium.

The western part of New Guinea, the largest island of the world, with several adjacent islands, forms part of the territory of the Netherlands. The area remained Dutch upon the transfer of sovereignty in Indonesia in Dec., 1949, the understanding that its status would be determined within one year by negotiation between the Netherlands and Indonesia. Subsequent negotiations did not lead to any agreement.

Dutch influence dates back to the activities of the Dutch East India Company in the 17th century.

Papuans are the dominant stock; are also Melanesian and Negrito elements. Commerce and industry are almost nonexistent, except for oil production, and primitive, with head-hunting and cannibalism not unknown even today.

Nicaragua (Republic)

(República de Nicaragua)

Area: 57,143 square miles.*
Population (est. 1958): 1,378,000 (1943: 1,250,000); 69% white, 17% Negro, 9% Indian, 5% Chinese.
Density per square mile (land only): 24.

President: Luis Somoza Debayle.
Principal cities (est. 1958): Managua, capital; León, 44,226 (trading center); Granada, 28,904 (trading center); Matagalpa, 17,872 (sugar).
Administrative unit: Córdoba.
Language: Spanish.
Religion: Roman Catholic.
Inland water area of 3,475 square miles.

STATUS IN THE WORLD TODAY

Nicaragua has been under the control of military dictatorship since 1936, first under General Anastasio Somoza, who seized power that year, and since his assassination in 1956 under his son, Luis. Nicaragua has been the target of a group of revolutionaries reported to have the encouragement of two recently liberated nations, Cuba and Venezuela. Under the Somozas, the country has experienced considerable economic development in which the family has participated and from which it has benefited. Agriculture has been diversified, and a network of roads has been constructed. Manufacturing has begun to appear in principal cities.

History. Nicaragua, which established independence in 1838, was first visited by Spanish mariners in 1522. The chief of the country's leading Indian tribe at that time was called Nicaragua, from whom the name derived its name. A United States military force intervened in 1909 after two Nicaraguan citizens had been executed, and U.S. Marines were kept in the country until 1912 to 1925. The Bryan-Chamorro treaty of 1916 gave the United States an exclusive right on a canal route through Nicaraguan territory and naval bases. Disorder after the 1928 elections brought in U.S. Marines, but they were withdrawn after the supervised elections of 1928.

Government. The Constitution of 1950 provides for a President popularly elected for five years, and a two-house Congress—Legislative Chamber of Deputies and a Senate—both elected for six

years. Former Presidents of the republic automatically become Senators.

ECONOMIC CONDITIONS. More than half of Nicaragua is jungle-covered; agriculture, the leading industry, utilizes only 10 per cent of the total land.

Chief exports in 1958 were coffee (34%), cotton (35%), and gold (10%). Leading customers were the U.S. (37%), West Germany (17%), and the Netherlands (12%); leading suppliers were the U.S. (55%), West Germany (8%), and the Netherlands Antilles (7%).

NATURAL FEATURES AND RESOURCES. Largest but most sparsely populated of the Central American nations, Nicaragua is mountainous in the west, with fertile valleys. A plateau slopes eastward toward the Caribbean.

Two big lakes—Nicaragua, about 100 miles long, and Managua, about 38 miles long—are connected by the Tipitapa River. The Pacific coast is bald and rocky; the Caribbean coast, swampy and indented, is aptly called the "Mosquito Coast."

Gold and silver are the most important minerals. One-third wooded, Nicaragua produces mahogany, rosewood, cedar, rubber, and ipecac root.

Norway (Kingdom)

(Norge)

Area: 125,064 square miles.
Population (est. 1959): 3,557,000 (Norwegian, 98.7%; Swedish, .8%; others, .5%).
Density per square mile: 28.4.
Sovereign: King Olaf V.
Prime Minister: Einar Gerhardsen.
Principal cities (est. 1958): Oslo, 461,591 (capital, chief port); (census 1950) Bergen, 114,711 (seaport, shipbuilding); Trondheim, 58,915 (seaport, timber, fish); Stavanger, 52,848 (seaport, fisheries).
Monetary unit: Krone.
Language: Norwegian.
Religions: Evangelical Lutheran (state), 96.8%; others, 3.2%.

STATUS IN THE WORLD TODAY

Norway's foreign policy is strongly pro-Western and pro-American. Although its military strength is not great (army, navy, and air force are small), its strategic location and its firm adherence to NATO give it important significance in the cold war. For this reason it has been one of the targets of vituperative Moscow propaganda, having had a common frontier with the U.S.S.R. since the Russians took the Petsamo area from Finland in 1941.

HISTORY AND GOVERNMENT. Norwegians, like the Danes and Swedes, are of

Teutonic origin. The Norsemen, also known as Vikings, ravaged the coasts of north-western Europe from the eighth to the eleventh century.

In 1815, Norway, contrary to her wishes, fell under the control of Sweden. The union of Norway, inhabited by fishermen, sailors, merchants, and peasants, and Sweden, an aristocratic country of large estates and tenant farmers, was not a happy one, but it lasted for nearly a century. In 1905 the Norwegian parliament arranged a peaceful separation and invited a Danish prince to the Norwegian throne—King Haakon VII. A treaty with Sweden provided that all disputes were to be settled by arbitration and that no fortifications be erected on the common frontier. Since the separation the two countries have lived amicably as neighbors.

When World War I broke out, Norway joined with Sweden and Denmark in a decision to remain neutral and to co-operate in the joint interest of the three countries. In World War II Norway was invaded by the Germans on April 9, 1940. She resisted for two months before the Nazis took over complete control. King Haakon and his government fled to London, where they established a government-in-exile. Major Vidkun Quisling, who collaborated with the Nazis, was executed by the Norwegians in October, 1945.

Norway is a constitutional hereditary monarchy. Executive power is vested in the King together with a Cabinet, or Council of State, consisting of a Prime Minister and at least seven other members. The *Storting*, or Parliament, is composed of 150 members elected by the people under proportional representation. The *Storting* discusses and votes on political and financial questions, but divides itself into two sections (*Lagting* and *Odelsting*) to discuss and pass on legislative matters. The King cannot dissolve the *Storting* before the expiration of its term. There is universal suffrage, male and female, for all citizens over twenty-three. In 1913 Norway had the distinction of being the first independent nation to establish woman suffrage.

RULER. Olaf V, born July 2, 1903, only son of Haakon VII and Princess Maud (1869-1938), third daughter of Edward VII of England, succeeded to the throne on the death of his father Sept. 20, 1957. He married Princess Märtha of Sweden (1901-1954) on March 21, 1929. Their children are Princess Ragnhild Alexandria (born 1930), Princess Astrid (born 1932), and Prince Harald (born 1937).

ECONOMIC CONDITIONS. Land, suitable for cultivation, estimated at less than 5 per cent of the total area, consists of strips in the deep narrow valleys and around

fjords and lakes. Foodstuff production insufficient to meet domestic needs. Leading crops, with 1958 production in millions of tons, are wheat, 17,000; barley, 356,000; oats, 134,000; potatoes, 1,202,000; hay, 1,202,000. The country is more adapted to stock raising than to crop growing. In 1958 there were 1,126,000 cattle, 1,800,000 sheep, 459,270 hogs, and 110,000 goats.

Raw materials produced in Norway are the basis of most of the manufacturing. Leading industries are food, machinery, metals, wood, paper, and electro-chemicals.

In 1958 the leading customers were Britain (19%), West Germany (14%), Sweden (10%), and the U.S. and Canada (9%). Leading suppliers were Britain (15%), West Germany (20%), Sweden (16%), and the U.S. and Canada (11%). Chief exports were base metals (21%), fish and fish preparations (14%), and waste paper (10%), and paper manufactures (10%).

The normally adverse trade balance is offset to some extent by invisible exports, particularly the earnings of the large merchant marine.

NATURAL FEATURES AND RESOURCES. Nearly 70 per cent of Norway is uninhabited and covered by mountains, glaciers, moors, and rivers. The hundreds of fjords that cut into Norway's coast give it an over-all ocean front of more than 12,000 miles. Islands off the coast numbering almost 150,000, form a breakwater and make a safe coastal shipping channel.

Mineral resources are extensive, but deposits are entirely lacking except in Spitsbergen. Important minerals are iron ore, aluminum, pyrite ore, zinc, copper ore, molybdenum ore, tungsten, antimony ore, tin, and silver.

Cheap electric power, produced mainly by hydroelectric plants, makes possible the extraction of nitrogen from the atmosphere and the manufacture of potassium nitrate, an important fertilizer.

The forests, largely in the south and southeast, are one of the chief natural resources. About 25% of the total area is covered with forests, of which 70% is coniferous.

Fishing is one of the principal industries, engaging as many as 100,000 persons.

Panamá (Republic) (República de Panamá)

Area: 28,753 square miles.

Population (est. 1959): 1,024,000 (mestizo, 65.34%; Negro, 13.31%; white, 11.07%; Indian, 9.53%; others, .75%).

Density per square mile: 35.6.

President: Roberto Chiari.

Principal cities (est. 1958): Panamá

238,980 (capital and chief port);
64,430 (chief Caribbean port);
David, 14,847 (bananas).
etary unit: Balboa.
guage: Spanish (official).
igion: Roman Catholic, 93%; Protes-
3%; others, 1%.

STATUS IN THE WORLD TODAY

importance of the Republic of Pan-
a pro-Western democracy, lies in the
a Canal, which has become a con-
target of the country's extreme
alists. Encouraged by Nasser's ex-
a few of them would like to na-
ze the international waterway.
want the United States to give
á 50% of the gross receipts from
eration of the canal. The govern-
itself is protesting against alleged
mination in the hiring of Pana-
ns in the Canal Zone and against
n United States government-owned
in the zone, a profitable business
it feels should go to its own re-
An Act of the Panamanian Con-
extending territorial waters from
to twelve miles, which might force
approaching and leaving the canal
s through Panamá's jurisdiction, is
her cause of dispute, not only with
ited States, but also with other na-

April, 1960, President Eisenhower put
fect a nine-point program, including
yed housing and pay raises for Pana-
workers in the Canal Zone and an
ded training schedule for them. Po-
y, Panamá has experienced a series
hor upheavals in the past two years,
he landing of a group of less than
surgents from Cuba was enough
se a mild case of hysteria and an
for help to the Organization of
an States. Economically, revenues
canal tolls are of decreasing impor-
and the country is beginning to ex-
natural resources which have not
touched since independence was
ed. A steel mill has been built, a
nese mine has been opened, and
and is being extended to help
ood for a population which just
s one million but which is expected
able in ten years.

RY. Visited by Columbus in 1502
fourth voyage and explored by Bal-
a 1513, Panamá was the principal
hipment point for Spanish treasure
plies to and from South and Cen-
merica in colonial days. In 1821,
Central America revolted against
Panamá joined Colombia, which al-
had declared its independence. For
xt 82 years, Panamá attempted un-

successfully to break away from Colombia.
After U.S. proposals for canal rights over
the narrow isthmus had been rejected by
Colombia, Panamá proclaimed its inde-
pendence with U.S. backing in 1903.

For canal rights in perpetuity, the
United States paid Panamá \$10,000,000,
and agreed to pay \$250,000 each year, in-
creased to \$430,000 after devaluation of
the U.S. dollar in 1933 and to \$1,930,000
under a revised treaty signed Jan. 25, 1955.
In exchange, the United States got the
Canal Zone, a ten-mile-wide strip across
the isthmus and a considerable degree of
influence in Panamá's affairs.

GOVERNMENT. The President is elected
by direct popular vote for 4 years and may
not succeed himself. There are also 2
Vice-Presidents elected for 4 years. The
legislature consists of a unicameral Na-
tional Assembly of 53 members elected by
direct popular vote for 4 years. Panamá has
universal suffrage.

ECONOMIC CONDITIONS. About five-
eighths of the nation is unoccupied. A
fourth of the population is in Colón and
in Panamá City, the oldest white settle-
ment on the Pacific coast of the Americas.
In the cities, the lower classes are Negro
and Negroid, descendants of British West
Indian laborers on the canal.

Bananas are the main agricultural crop.
Chief exports in 1958 were bananas (68%)
and fresh shrimp. The United States was
the leading customer (96%) and supplier
(55%).

The Panama Canal is the country's big-
gest economic asset. The main railway is
the U.S. Government-owned Panamá
Railroad, 47.64 miles long, bridging the
isthmus from Panamá City to Colón. In
recent years many foreign ships have been
registered in Panamá to escape high labor
costs and governmental regulations in
other nations.

NATURAL FEATURES. Panamá is roughly
the size of South Carolina. At the narrow-
est and lowest point, the canal bisects the
country. Outlying islands number about
630 in the Caribbean, 116 in the Pacific.

Paraguay (Republic) (República del Paraguay)

Area: 157,047 square miles.

Population (est. 1958): 1,677,000 (1950:
mestizo, 94.9%; white, 3.0%; Indian,
2.1%).

Density per square mile: 10.7.

President: Gen. Alfredo Stroessner.

Principal cities (census 1950): Asun-
ción, 201,340 (capital); Villarrica, 14,680
(sugar, tobacco); Concepción, 14,640 (port,
Paraguay river); Encarnación, 13,321 (rail
terminus).

Monetary unit: Guaraní.
Languages: Spanish (official), Guaraní.
Religion: Roman Catholic (official).

STATUS IN THE WORLD TODAY

Paraguay has recently been the scene of considerable political unrest, possibly because the success of revolutionists in Cuba and Venezuela has revived hopes of opposition leaders, both inside the country and in exile. Although Gen. Alfredo Stroessner, the president, said in April, 1959, that he would send Congress a series of bills providing for gradual restoration of constitutional government, and later that month lifted the state of siege, a modified form of martial law, under which the country had been ruled since 1947, he dissolved the Chamber of Deputies in May, restored the stage of siege, and arrested scores of political leaders, some of them in the ruling Colorado party which, with the army, supports the government.

Despite the political unrest, the country enjoys economic stability and the government has instituted a certain amount of social and economic reform, such as giving small farmers land under an agrarian reform program, enacting social security legislation, extending collective bargaining, and encouraging a moderate degree of industrialization. The country remains, however, a predominantly agricultural and grazing nation.

HISTORY AND GOVERNMENT. In 1526 and again in 1529, Sebastian Cabot explored Paraguay when he sailed up the Paraná and Paraguay Rivers. From 1608 until their expulsion from the Spanish dominions in 1767, the Jesuits maintained an extensive establishment in the south and east of Paraguay. In 1811 Paraguay revolted against Spanish rule and became a nominal republic under two Consuls.

Actually Paraguay was governed by three dictators during the first 60 years of independence. The third, Francisco Lopez, declared war on both Brazil and Argentina in 1864-65, a conflict in which the male population was almost wiped out. A new constitution in 1870, designed to prevent dictatorships and internal strife, failed to do so, and not until 1912 did a period of comparative economic and political stability begin. The dispute between Paraguay and Bolivia over the Chaco territory led to war in 1932 and was finally settled by the 1935 Buenos Aires peace conference, which gave most of the Chaco to Paraguay.

The Paraguayans are a homogeneous blend of Spanish, Portuguese, and Italian, with considerable Guaraní Indian blood. There are almost no Negroes; the 35,000

to 50,000 uncivilized Indians live mainly in the Chaco. The country is 90 per cent bilingual, with Guaraní dominating Spanish (the official language) in rural areas.

The President is elected by popular vote for 5 years. Paraguay has a Congress elected by popular vote and a Council of State whose members are nominated by the Government. The Cabinet is appointed by the President and holds all executive power, merely informing the Congress of the Council of State of its decisions.

ECONOMIC CONDITIONS. A well-favored land, Paraguay is predominantly a farming country, keeping about 4,095,000 head of cattle. The soil is fertile and the climate suitable for subtropical crops. The chief cash crop is cotton.

Chief exports in 1958 were timber (24%), meat and products (24%), quebracho extract (10%), and cotton (11%). Principal customers and suppliers in 1958 were Argentina, the United States, and Germany.

NATURAL FEATURES AND RESOURCES. Eastern Paraguay, between the Paraná and Paraguay Rivers, is upland country. The thickest population settled on the grassy slope that inclines toward the Paraguay River. The greater part of the western region, to the west, is covered by marshes, lagoons, dense forests, and jungles.

Forest resources are considerable, especially in the Chaco. Quebracho ("Axe-breaker," a wood so heavy that it will not float—is the principal commercial tree. The wood has many uses, from railroad blocks to ox-cart wheels. Quebracho tannin extract is the chief product.

Peru (Republic) (República del Perú)

Area: 496,222 square miles.

Population (est. 1959): 10,524,000 (60% Indian and mestizo, 53%; Indian, 46%; Ascanio Negro and others, 1%).

Density per square mile: 21.2.

President: Manuel Prado y Ugarteche.

Principal cities (est. 1958): Lima, 1,212 (capital); Callao, 129,365 (port); Lima; Arequipa, 121,806 (commercial center); Cuzco, 68,483 (ancient Incan capital); Trujillo, 60,427 (mining).

Monetary unit: Sol.

Languages: Spanish, Quéchua, Aymara (Indian).

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Peru, where until recently military dictatorship was virtually endemic, has been undergoing an experiment in democracy which may completely transform the country's social structure. Traditionally

alliance of the commercial and aristocracy and the army, the constitutional status quo has been challenged by the Aprista party, which arose as a student movement for university and social change. Although the Apristas showed they were the country's majority party, the party was declared illegal for many years. But the oppressions of the dictatorship, and general economic developments, convinced an important segment of the economic aristocracy that the changes advocated by the Apristas were bound to come sooner or later and it would be better to have them come in a democratic manner through an Aprista regime than violently, as in neighboring Bolivia. This group's candidate for president, Manuel Prado, won in 1956 with the support of the Apristas, and immediately fulfilled his campaign promise to reform the party. Since then he has preserved an uneasy regime which has guaranteed civil liberties but has been beset by serious economic and social problems. Many consider it a "caretaker" government holding office until the 1961 elections, which the Apristas expect to win.

HISTORY. Peru, once part of the great Inca Empire and later the major viceroyalty of Spanish South America, is more than three times the size of California. It was conquered in 1531-33 by Francisco Pizarro. On July 28, 1821, Peru proclaimed independence, but the Spanish were not completely defeated until the Battle of Ayacucho, Dec. 9, 1824. For a hundred years thereafter the Peruvian course was rough. Wars with Spain were frequent, and a new war broke out with Spain in 1864-66. The dispute over Chile over Tacna and Arica was finally settled until 1929.

GOVERNMENT. Under the 1933 Constitution, Peruvians elect by popular vote every six years a President, two Vice-Presidents and a bicameral Congress—a Senate of 52 members and a Chamber of 133 members. The President is ineligible to succeed himself and the Cabinet, headed by the Prime Minister, is presidentially appointed.

Peruvians are of mixed Spanish and Indian blood. The Indians come from the main stocks—Quechua, Aymará, and Chunchu. There is a relatively large Asiatic population.

AGRICULTURE AND ECONOMIC CONDITIONS. Land under cultivation is estimated at only slightly more than 10 per cent of the total area, and more than 80 per cent of the population being dependent upon agriculture. About one-eighth of the cultivated land is in the irrigated coastal valleys of the central region is devoted to cotton, the most important crop. Stock raising supplies most of the country's meat needs,

as well as wool, hides, and skins for export. Llamas, used as beasts of burden, and vicuñas and alpacas, noted for their wool, are native to Peru. Livestock estimates in Dec., 1957, showed 3,244,000 cattle, 14,130,000 sheep, 1,281,000 hogs, and 3,419,000 alpacas and llamas.

Chief exports in 1958 were cotton (26%), sugar (12%), copper (8%), and lead (8%). Chief suppliers were the United States (47%), West Germany (11%), and Britain (8%); chief customers, the United States (42%), Britain (9%), and Chile (10%). Principal Peruvian imports are machinery and motor vehicles, foodstuffs (especially wheat), iron and steel manufactures, electrical goods, and chemicals.

NATURAL FEATURES AND RESOURCES. The Andes Mountains divide Peru into three sharply differentiated zones. To the west is the coastline, much of it arid, extending for 50 to 100 miles inland.

The mountain area, with peaks over 20,000 feet high, lofty plateaus and deep valleys, lies centrally. Beyond the mountains to the east is the heavily forested slope leading to the Amazonian plains.

Peru has vast mineral resources. It ranks fifth in world silver production and mines about 25 per cent of the world's vanadium. But mining is second to agriculture, and nearly all of it is in the hands of foreign capital. Petroleum and copper are the most important, with the latter controlled by the American-owned Cerro de Pasco Corporation, which also accounts for much of the gold and silver output.

An important industry on the outlying islands is the gathering of guano (bird excrement), a valuable fertilizer.

The Philippines (Republic)

Area: 115,707 square miles.

Population (est. 1959): 24,718,000 (Filipino, except [1948] 121,702 Chinese, 6,955 Americans, 1,886 Spanish and 3,319 others).

Density per square mile: 213.7.

President: Carlos P. Garcia.

Principal cities (est. 1959): Manila, 1,205,340 (seat of government, chief port); (est. 1952) Cebu, 205,201 (seaport); Quezon City, 159,730 (legal, future capital); Basilan, 141,640 (lumber); Bacolod, 126,200 (sugar); Zamboanga, 124,710 (seaport).

Monetary unit: Peso.

Languages: English, Tagalog, Bisayan, Spanish, Ilocano, Bicol.

Religions (census 1948): Roman Catholic, 82.9%; Aglipayan (Independent Philippine Catholic), 7.6%; Moslem, 4.1%; Protestant, 2.3%; others, 3.1%.

STATUS IN THE WORLD TODAY

The foreign policy of the Philippines is

pro-Western and anti-Communist, the new republic being a member of the Southeast Asia Treaty Organization. Emerging as an independent state after centuries of Spanish and American rule, the Philippine people have chosen to build a democratic society in close alliance with the United States. Militarily, the islands have relied for external defense on the United States, which secured the leasehold of a number of bases when independence was granted. In 1951 a mutual-defense pact was signed.

The most pressing problems facing the young republic are economic. They result largely from two causes: the great destruction wrought during World War II and the gradual imposition of tariffs on Filipino goods entering the American market. As long as the islands were administered by the United States, Filipino goods entered duty-free. Since the grant of commonwealth status to the islands in 1935, however, it has been United States policy gradually to end this preferential tariff treatment. Consequently, Filipino exports have been sharply reduced. Efforts are being made to offset this by stimulating the domestic production of commodities formerly imported and by diversification of agriculture. But import needs continue high and capital for domestic economic development is short. The United States has given substantial aid, the latest being an additional \$125 million loan, but the solution to the quest for economic independence is not yet in sight.

HISTORY AND GOVERNMENT. Fernando Magellan, the Portuguese navigator in the service of Spain, discovered the Philippines on March 16, 1521, and then 21 years later a Spanish exploration party named the group of islands in honor of Prince Philip, later Philip II of Spain. Spain retained possession of the islands for the next 350 years.

The Philippines were ceded to the United States in 1899 by the Treaty of Paris after the Spanish-American War. Meanwhile the Filipinos, led by Emilio Aguinaldo, had declared their independence. They continued guerrilla warfare against U.S. troops until the capture of Aguinaldo in March, 1901. By July, 1902, peace was established except among the Moros.

The first U.S. civilian Governor-General was William Howard Taft (1901-04). The Jones Law (1916) provided for the establishment of a Philippine Legislature composed of an elective Senate and House of Representatives. The Tydings-McDuffie Act (1934) provided for complete Philippine independence in 1946. Under a Constitution approved by the people of the Philippines May 14, 1935, the Commonwealth of the

Philippines was inaugurated on Nov. 1, 1946, under the presidency of Manuel Quezon. Quezon died in 1948, and was succeeded by Elpidio Quirino. Quirino was re-elected in 1949. In 1948, Manuel A. Roxas was elected president. He was re-elected in 1953. In 1953, he was succeeded by Ramon Magsaysay. Magsaysay was succeeded by Carlos P. Garcia.

The Philippines were invaded by Japanese troops on Dec. 8, 1941 (Philippine time), and after the fall of Bataan Corregidor, President Quezon and his government fled to Washington, D.C. Forces led by Gen. Douglas MacArthur invaded the islands in Oct., 1944, and the liberation of Manila (Feb., 1945). Sergio Osmeña, who had succeeded to the presidency on the death of Quezon (July 1, 1944), re-established the government.

Brig. Gen. Manuel A. Roxas y A. who defeated Osmeña in the election of April, 1946, became first head of the independent republic. He died April 1, 1948, and was succeeded by the Vice-President, Elpidio Quirino. The latter was elected on Nov. 8, 1949, but lost a bid for re-election to Ramon Magsaysay who took office on Dec. 30, 1953. On March 17, 1953, Magsaysay was succeeded by Vice-President Carlos P. Garcia.

ECONOMIC CONDITIONS. Agriculture. Industry. Agriculture is the chief industry. Average size of the farms is ten acres. There are many large plantations. Rice (palay) is the staple native food crop but production is insufficient for home consumption. The Philippines normally produce about half the world supply and a large proportion of the abacá (Manila hemp) supply; they are a leading source of sugar and sugar products, normally the chief export. Crops include sisal, kapok, cotton, tobacco, coffee, rubber, cacao, citrus fruits and bananas. Livestock on March 31, 1953, included 3,596,000 water buffalo, the farmers' all-purpose animal, 836,080 cattle, 140 horses, and 5,765,370 hogs.

There are no large industrial establishments and activity is limited primarily to the processing of agricultural products, such as sugar cane, coconut, tobacco, abacá, and timber. Preparation of fine embroideries is an important industry.

In 1956, the chief exports were coconut and other coconut products (39%), (22%), wood (11%), and abacá (9%). Leading customers were the United States (54%), Japan (18%), and the Netherlands (9%); leading suppliers, the United States (59%), Japan (10%), and Indonesia. Leading imports were machinery and vehicles, cotton and manufactures, iron and steel, and petroleum and products.

NATURAL FEATURES AND RESOURCES. The Philippines are an archipelago of approximately 7,083 islands lying about 100 miles off the southeast coast of Asia. The northernmost island, Luzon, is six

from Formosa, while the southern-Saluag, is thirty miles east of Borneo. 466 of the islands have an area of than one square mile, and only have names. The largest islands are in the north (40,814 sq. mi.), nao in the south (36,537 sq. mi.), (5,124 sq. mi.), Negros (4,903 sq. mi.) and Palawan (4,550 sq. mi.).

als, Forests and Fisheries. The Philippines possess large but relatively undeveloped mineral resources. Most important are gold, silver, iron ore, copper ore, chromite, manganese ore, lead, and zinc.

Poland (People's Republic)

Polska Rzeczpospolita Ludowa)

Area: 120,359 square miles.

Population (est. 1959): 29,600,000.

Density per square mile: 245.9.

Chairman of State Council: Aleksander Gierki.

President: Josef Cyrankiewicz.

Principal cities (est. 1958): Warsaw, 1,000,000 (capital); Łódź, 696,000 (industrial center); Wrocław (Breslau), 396,100 (German industrial center); Kraków, 61,000 (commercial center); Poznań, 100,000 (farm products).

Currency unit: Złoty.

Language: Polish (more than 90%).

Religions: Roman Catholic, Jewish, Prot-

estants are not recognized by the Western powers. Consequently, Poland, having been forced to cede territory in the east to Russia, can look only to Russia to help it keep the German territory it received in return in the West. Having been partitioned and oppressed so often by both countries, the Poles dislike or hate the Germans and Russians in about equal proportion.

In its foreign relations the Polish government has little leeway in making independent decisions. The most the regime has been able to accomplish is to arrange small, short-term loans with the United States. Economically, it needs larger, long-term assistance. The former Stalinist policy of concentrating on heavy industry meant home construction and agriculture were starved for funds. Insufficient mechanical improvement in agriculture, coupled with forced collectivization resulted in a drop in farm production. Compulsory exports, until 1953, of coal, Poland's chief marketable material, to Russia at 1/12 of world prices robbed the country of possibilities of profitable trade and accumulation of convertible currency. Since 1956 the government has been trying to alleviate the worst of economic evils. Non-productive, wasteful projects have been scrapped. Poland is no longer exploited in its export of coal and other items to Russia. Collectivization has been stopped and most of the existing collective farms disbanded. But the problems of economic rehabilitation are still staggering.

STATUS IN THE WORLD TODAY

Poland is the most unusual of Soviet satellites in that it has managed, despite international criticism, to substitute its own brand of communism for the Moscow variant and yet avoid the military intervention which Hungary suffered and the propaganda attacks which assailed Czechoslovakia. Poland remains a dictatorship by a single party, but it is a more benevolent dictatorship than in any other Communist-run country. Władysław Gomułka rose to power in 1956 in a bloodless revolution because the Polish people supported his policy of national self-determination, democratic political reforms, and restoration of the health of the political system. There has been some retreat from extreme positions of freedom won by the revolution in 1956, but the fact that the people still grumble at the tops of their heads clearly distinguishes them from less fortunate neighbors.

Because of its geographical position, Poland cannot be entirely free of Soviet domination. Russian troops are stationed to maintain the supply lines to the Soviet forces in East Germany. And Poland's present frontiers have been created unilaterally by the Soviet Union and

HISTORY. Little of certainty is known about Polish history before the eleventh century, when King Boleslaus I (the Brave) ruled over Bohemia, Saxony, and Moravia. Mongol invasions in 1241 and 1259 were repelled. Meanwhile, the Teutonic Knights were erecting in Prussia a state which included part of Poland and barred the latter's access to the Baltic. The Knights were defeated by Władislaus II at Tannenberg in 1410 and became Polish vassals, and Poland regained a Baltic shoreline.

Poland reached the peak of its power between the fourteenth and sixteenth centuries. Poles scored military successes against the Russians and Turks. In 1683, King John Sobieski turned back the Turkish tide near Vienna.

These successes did not halt the process of decline which resulted from the lack of strong central authority, and Prussia, Russia, and Austria were able to carry out a first partition of the country in 1772, a second in 1792 and a third in 1795-96. For more than a century thereafter, there was no Polish state, but the Poles never ceased their efforts to regain their independence. World War I found them fighting unhappily on both sides.

The independence of Poland was formally proclaimed in Nov., 1918, and Marshal Josef Pilsudski was confirmed in office as President. In 1919, Ignace Paderewski, famous pianist and patriot, became the first Premier. Russia attacked Poland in 1920 but the Poles, under Marshal Pilsudski and aided by the French, defeated the invaders. On May 12, 1926, Marshal Pilsudski seized complete power in a coup d'état and ruled the country dictatorially until his death on May 12, 1935, when he was succeeded as commander of the army by Marshal Edward Smigly-Rydz.

Despite a 10-year nonaggression pact signed with Germany in 1934, Hitler attacked Poland on Sept. 1, 1939. Russian troops invaded from the east Sept. 17, 1939, and on Sept. 28 a German-Russian agreement was signed dividing Poland between Russia and Germany. W. Racziewicz formed a government-in-exile in France with Gen. Wladyslaw Sikorski as Premier; this government moved to London after France's defeat in 1940.

All of Poland was occupied by Germany after the Nazi attack on the Soviet Union in June, 1941. On July 30, 1941, Poland concluded an agreement with the U.S.S.R. voiding all German-Soviet agreements effected after Sept. 1, 1939.

The legal Polish government soon fell out with the Russians, however, and in July, 1944, a Communist-dominated Polish Committee of National Liberation received Soviet recognition. Moving to Lublin after that city's liberation, it proclaimed itself the Provisional Government of Poland on Dec. 31, 1944. Some former members of the Polish Government in London joined with the Lublin government to form the Polish Government of National Unity on June 28, 1945. Great Britain and the United States recognized this government on July 5, 1945.

On Aug. 2, 1945, in Berlin, Prime Minister Attlee, President Truman and Generalissimo Stalin established a new *de facto* western frontier for Poland, along the rivers Oder and Lausitzer Neisse, pending a final peace treaty. On Aug. 16 the Soviet Union and Poland signed a treaty delimiting the Soviet-Polish frontier. Under these agreements Poland was shifted westward. In the east it lost 69,860 square miles with 10,772,000 inhabitants; in the west it gained (subject to final peace-conference approval) 38,986 square miles with a pre-war population of 8,621,000.

GOVERNMENT AND DEFENSE. The 1952 Constitution is based on that of the U.S.S.R. The supreme organ of state authority is the Sejm, composed of 425 members elected for four years by all citizens over 18.

ECONOMIC CONDITIONS. Agriculture. Poland remains essentially an agricultural country: the areas now under *facto* Polish administration in the east accounted for 25% of Germany's pre-war food production. Farm lands lost to the Soviet Union were considerably larger area than those gained from Germany.

Industry. Industrial facilities, although severely damaged during World War I, were not greatly affected by territorial cessions to the U.S.S.R., with the exception of the Lwów area. On the other hand, important German industrial areas, especially Silesia and the city of Katowice, are located in the territories under *de facto* Polish administration. As a result, post-war Poland has a much larger industrial potential. Almost all industries have been nationalized or placed under state control, and a planned economy has been introduced as part of the government's drive to make Poland an industrial nation.

Trade. Foreign trade is largely conducted by government bodies under the terms of numerous trade agreements with other nations. Major exports in 1954 were grain and coke, other raw materials, and manufactures and agricultural products (mainly bacon and ham). Major imports were machinery, textiles, chemicals, and mineral products.

NATURAL FEATURES AND RESOURCES. Most of Poland is a plain with no natural boundaries except the Carpathian Mountains on the south and the Oder and Neisse Rivers on the west.

The acquisition of large coal deposits in German Silesia, combined with the larger reserves in the southwestern region, makes Poland one of the world's largest coal producers. Iron ore deposits are located in the Kielce and Radom districts and in German Silesia (metal content 34%). Zinc and lead ores are located chiefly in Upper Silesia and the voivodeships of Kielce and Kraków. Pre-war Poland's principal oil-producing fields at Boryslaw-Drohobycz, are in the territories ceded to the Soviet Union; Among the deposits, Poland possesses copper, silver, chalk, clay, kaolin, marble, and granite.

Portugal (Republic) (República Portuguesa)

Area: 35,358 square miles.

Population (est. 1959): 9,052,000 (all Portuguese).

Density per square mile: 256.0.

President: Americo Deus R. Tomaz.

Premier: António de Oliveira Salazar.

Principal cities (census 1950): Lisbon, 790,434 (capital, seaport); Oporto, 280,000 (seaport, port wine); Setúbal, 44,235.

sardines); Coimbra, 42,640 (university in Madeira Islands), 37,215 (Madeira wine).
 Monetary unit: Escudo.
 Language: Portuguese.
 Religion: Roman Catholic.

PORTUGAL IN THE WORLD TODAY

Portugal, long an ally of Great Britain, on the side of the free world in the last cold war and is a member of the Atlantic Treaty Organization, which joined in April, 1949. Situated in an important geographical area on the southern periphery of Europe, the country has a kind of fixed aircraft carrier. Although there has been criticism about the wisdom of including Portugal, membership, among the nations of Free Europe in NATO, it is said that support for the policy of containment of communism must be sought wherever it can be found. Defenders of the regime—as in other dictatorships—say that while it is ostensibly opposed to democratic and liberal ideas, it has brought economic and political stability to Portugal. The opposition candidate for the Presidency in the elections of June, 1958, Lt. Gen. Humberto Delgado, deemed it necessary, after being stripped of his military titles, to seek refuge in the Brazilian embassy and then go into exile.

RELIGION AND GOVERNMENT. Portugal was a part of Spain until it won its independence in the middle of the twelfth century. King John I. (1385–1433) unified the country at the expense of the Castilians and the Moors of Morocco. The expansion of Portugal was brilliantly continued by John's son, Prince Henry, the Navigator. In 1488 Bartholomew Diaz reached the Cape of Good Hope, proving that the Far East was accessible by sea. In 1498 Vasco da Gama reached the western coast of India. By the middle of the sixteenth century the Portuguese Empire included West and Central Africa, Brazil, Persia, Indo-China, and Japan.

In 1581 Philip II of Spain invaded Portugal and held her captive for 60 years. This was followed a catastrophic decline of Portuguese commerce. Courageous and able explorers, the Portuguese proved to be inefficient and corrupt colonizers. By the late sixteenth century the Portuguese dynasty was restored. In 1640, Dutch, English, and French challengers began to seize the lion's share of the world's colonies and commerce. Portugal retained Angola and Mozambique in Africa and Brazil (until 1822), but her status as an imperial power was lost forever.

In the first half of the nineteenth century Portugal's political history was distinguished by dynasty quarrels and factional strife. The corrupt King Carlos, who ascended the throne in 1889, made João Franco the Premier with dictatorial power in 1906. In 1908 Carlos and his heir were shot dead on the streets of Lisbon. The new king, Manuel II, was driven from the throne in the Revolution of 1910. Portugal was proclaimed a republic with a system modeled upon that of France.

Traditionally friendly to Great Britain, Portugal entered World War I on the Allies' side, and Portuguese troops fought on the Western Front and in Africa. In 1926 a revolution drove out the President, and six years later the Salazar dictatorship began.

Dr. António de Oliveira Salazar, founder of the National Union in 1930, has been Premier and dictator of Portugal since 1932. The constitution, adopted by plebiscite in 1933, and amended in June, 1959, provides for a President chosen for a term of 7 years by an electoral college made up of members of the National Assembly and the Corporative Chamber and of representatives from each metropolitan district and overseas province. The National Assembly has 130 members elected by popular vote for 4 years and the Corporative Chamber represents various economic and social groups in the nation. The Premier is appointed by the President but neither the Premier nor his Cabinet are responsible to the National Assembly.

ECONOMIC CONDITIONS. Portugal's corporate state has a planned economy in which each producing unit regulates itself in the interest of the nation. Corporate units have been established in agriculture, industry, and finance.

Sixty per cent of Portugal's people are engaged in agriculture. Although wheat is the leading crop, it is insufficient to meet domestic needs, and grain must be imported. One of the world's leading wine-makers, Portugal produces two famous kinds—Port in the vicinity of Oporto, and Madeira in the islands of the same name. In olive-oil production, Portugal usually ranks third in the world.

Leading crops are wheat, barley, and oats.

In 1958 the principal customers were continental EPU dependencies (31%), continental EPU countries (18%), Britain (11%), U.S. and Canada (9%); chief suppliers, continental EPU countries (48%), continental EPU dependencies (18%), Britain (13%), U.S. and Canada (8%). The chief exports were cork (16%), wine (11%), and fish (13%), mainly sardines.

NATURAL FEATURES AND RESOURCES.

Portugal is crossed by many small rivers, and also by three large ones which rise in Spain, flow into the Atlantic, and divide the country into three geographic areas. The Minho (Miño in Spain) River, part of the northern boundary, cuts through a mountainous area that extends south to the vicinity of the Douro (Duero) River. South of the Douro the mountains slope to the plains about the Tagus (Tejo) River. The remaining division is the southern one of Alentejo.

The Azores, stretching over a distance of 400 miles in the Atlantic, consist of nine islands divided into three groups, with total area of 888 square miles. The nearest continental land is Cape da Roca, Portugal, which lies 800 miles to the east. The Azores are an important station on Atlantic air routes, and both Britain and the United States established air bases there during World War II. Madeira, consisting of two inhabited islands, Madeira and Porto Santo, and two groups of uninhabited islands, lies in the Atlantic about 535 miles southwest of Lisbon.

Mineral resources have not been fully developed, but wolfram, coal, iron ore, copper, manganese, iron pyrites, lead, tin, and other ores are found.

Portugal is one of the world's leading producers of cork.

The fishing industry is a basic part of the national economy. Of special importance is the sardine industry centered at Setúbal.

PORTUGUESE OVERSEAS TERRITORIES**AFRICA**

	Area, sq. mi.	Population, est. 1955
Angola	481,351	4,508,000*
Cape Verde Islands	1,557	192,000
Mozambique	297,731	6,234,000*
Portuguese Guinea	13,948	559,000*
São Tomé and Príncipe	372	62,000

ASIA

	Area, sq. mi.	Population, est. 1955
Macao	6	210,000
Portuguese India	1,538	649,000
Timor	7,332	493,000

* Estimated 1958.

The status of the Portuguese overseas territories is fixed by the Colonial Act of July, 1930, included in the Constitution approved March 19, 1933, and revised in 1951. Each territory has a Governor or Governor General, appointed by the Council of Ministers for an initial four-year term and responsible to the Minister of Overseas Territories at Lisbon. Each territory has financial and administrative autonomy.

ANGOLA (Portuguese West Africa)—Status: Overseas territory.

Capital: Loanda (pop. 1955: 189,590).
Governor General: Dr. Alvaro Rodrigues da Silva Tavares.

Chief exports: coffee, diamonds, meal.

Agricultural exports (1956): cotton, 75,000 metric tons; sisal, cotton, sugar, maize, palm kernels and oil, peanuts.

Minerals: diamonds (1957: 864,400 carats), lignite, copper.

Forest products: beeswax, timber.

Manufactures: sugar, palm oil, whale fish oil.

Angola stretches along the west African coast for about 1,000 miles from Belém Congo to the Cunene River. Outside the coastal plain varying in width from 10 to 100 miles, the area is part of the African plateau. The Angola coast and Congo River were explored by the Portuguese in 1482-85, and Loanda was founded in 1576. A legislative council with elected majority was established in Angola in 1955.

Angola is primarily an agricultural country. Its varied altitude enables it to produce both tropical and temperate crops. Excellent grazing land exists in many parts of the colony. The chief ports are Loanda and Lobito. The great majority of the population are of Bantu-Negro stock, except in the Congo district with pure Negroes.

CAPE VERDE ISLANDS—Status: Overseas territory.

Capital: Praia (population 9,980).

Governor: Maj. Silvino Silveira Martins.

Foreign trade (1957): exports, 364,000 escudos; imports, 378,361,000 escudos.

Chief exports: ships stores, preserved fish.

Agricultural products: coffee, millet, cotton oil, oranges, hides.

This group of 14 volcanic islands lying off the west African coast was discovered in 1456 by the Venetian captain Alvise Cadamosto, in the service of Prince Henry the Navigator. The island of São Vicente is an important fueling station for the South American route. The vast majority of the inhabitants are mulattoes—Negroes—descendants of slaves brought to the islands from Africa by early settlers. Public slavery was abolished in 1854, and private slavery in 1876.

MOZAMBIQUE (Portuguese East Africa)—Status: Overseas territory.

Capital: Lourenço Marques (population 93,303).

Governor General: Cmdr. Pedro Correia Barros.

Foreign trade (1957): exports, 2,294,000 escudos; imports, 3,111,562,000 escudos. Chief exports: cotton, sugar, sisal, cashew nuts.

Agricultural exports (1958): cotton, 100,000 metric tons; sugar, 170,000 tons; sisal, 44,400 tons; (1956) sisal, 27,940 tons.

nuts, 37,974 tons; tea, 6,276 tons.
 Minerals: gold, coal, graphite, mica.
 Forest products: mangrove bark, timber.
 Gambië, stretching for about 1,430 miles along Africa's southeast coast, was discovered by Vasco da Gama in 1498, though the Arabs had penetrated into the area as early as the 10th century A.D. It was first colonized in 1505, and by the Portuguese were masters of all former Arab sultanates on the east African coast. The boundaries with British East Africa and South Africa were delimited in 1911, and with Tanganyika Territory in 1914 and 1890.

Agriculture is the chief industry. There are many large plantations, some of which are partially mechanized.

Eighty-nine per cent of the inhabitants are native Africans of the Bantu Tribes. Chief ports are Lourenço Marques and Beira, which is also the port for Rhodesia.

PORTUGUESE GUINEA—Status: Overseas territory.

Capital: Bissau (population 18,309).
 Governor: Cmdr. António Augusto Peixoto.

Foreign trade (1956): exports, 203,208,000 escudos; imports (1954), 172,115,066 escudos. Chief exports: peanuts (53%), cashews, nuts.

Agricultural products: peanuts, coconuts, rice, palm oil.

Forest products: timber, wax, rubber.

The area, lying on the west African coast and almost surrounded by French Guinea, was discovered in 1446 by the Portuguese Nuno Tristão and was separated from the colony of the Cape Verde Islands in 1879. It consists of a low-lying coastal region and 60 islands off the coast. The country is undeveloped economically and most of the natives are farmers. There are no railways, but navigable rivers. Shipping over 1,000 miles are important sea routes.

TOMÉ AND PRÍNCIPE—Status: Overseas territory.

Capital: São Tomé (population 2,605).
 Governor: Dr. Manuel Marques Abrantes.

Foreign trade (1956): exports, 172,977,000 escudos; imports, 132,481,000 escudos. Chief exports: cacao (70%), copra (11%), coffee, nuts.

Agricultural products: cacao, coffee, copra, palm oil.

The volcanic islands, lying in the Gulf of Guinea about 150-175 miles off the African coast, were discovered by the Portuguese in 1471. Most of the early inhabitants were convicts and Jews from Portugal and slaves from Brazil and the East Indies, but the bulk of the present inhabitants are Negro contract laborers from East Africa and Cape Verde, engaged to cacao plantations.

MACAO—Status: Overseas territory.
 Capital: Macao (population 166,544).
 Governor: Joaquim Marques Esparteiro.
 Chief exports: fish, cement, preserves.
 Manufactures: cement, preserves, fire-crackers, vegetable oils, metal products.

Macao comprises the peninsula of Macao and the two small islands of Taipa and Coloane on the South China coast, about 35 miles from Hong Kong. Established by the Portuguese in 1557, it is the oldest European outpost in the China trade, but Portugal's sovereign rights to the port were not recognized by China until 1887, and its boundaries are still not delimited. The port has been eclipsed in importance by Hong Kong, but it is still a busy distribution center and also has an important fishing industry employing over 40,000 people. It is notorious for its opium trade and gambling houses. Most of the population is Chinese.

PORTUGUESE INDIA—Status: Metropolitan province.

Capital: Panjim (Nova Gôa) (population 31,950).

Governor General: Brig. Manuel Antonio Vassalo E Silva.

Foreign trade (1956): exports, 82,741,364 rupias* (40% to Japan); imports, 114,051,886 rupias (19% from Britain). Chief exports: iron ore (71%), manganese ore (25%), cashew nuts.

Agricultural products: cashew nuts, coconuts, spices.

Minerals (exports 1957): iron ore, 1,739,000 metric tons; manganese ore, 60,000 tons.

* 1 rupia = 5.97 escudos.

The area consists of Gôa and three islands on the Malabar coast of India; Damão and Diu, on the Gulf of Cambay; and Daulatpur, on the continental territories of Gocola and Simbor, on the coast of Gujarat. Gôa, captured in 1510 by the Portuguese, later became capital of the whole Portuguese empire in the east. The native population is largely Hindu. The Indian government has repeatedly pressed for the end of Portuguese rule here and as a result Indian-Portuguese relations have been very strained in the last few years.

TIMOR—Status: Overseas territory.

Capital: Dili (population 3,321).

Governor: Maj. Filipe Themudo Barata.

Foreign trade (1957): exports, 38,879,000 escudos (34% to the Netherlands); imports, 61,333,000 escudos (28% from Portugal). Chief exports: coffee, rubber.

Agricultural exports are: coffee, rubber, copra.

Forest products: sandalwood, wax.

Portuguese Timor consists of the eastern half of the island of Timor in the Malay Archipelago, with the territory of Ambeno and two neighboring islands. It was first

settled by the Portuguese early in the sixteenth century. In 1859 the island was divided between Portugal and the Netherlands later boundary adjustments were made in 1904. Fishing and copra manufacture are important; trade is mostly in the hands of Chinese, Malaysians, and Arabs. Timor was occupied by Dutch and Australian troops in Dec., 1941, and by the Japanese in Feb., 1942.

Rumania (People's Republic) (Republica Populara Româna)

Area: 91,699 square miles.

Population (census 1958): 18,059,000 (1948: Rumanian, 85.7%; Magyar, 9.4%; German, 2.2%; Jews, 0.9%; others [Turkish, Ruthenian, Bulgarian, Gypsy, Ukrainian] 1.8%).

Density per square mile: 196.9.

Chairman of Presidium: Ion Gheorghe Maurer.

Premier: Chivu Stoica.

Principal cities (census 1956): Bucharest, 1,236,906 (capital); Cluj, 154,752 (Transylvanian industrial center); Timisoara, 142,251 (western commercial center); Stalin (Brasov), 123,882 (industrial center); Ploesti, 114,560 (oil).

Monetary unit: Leu.

Languages: Rumanian, Hungarian, German, Turkish.

Religions (est. 1947): Eastern Orthodox, 81%; Greek Catholic, 9%; Roman Catholic, 7%; others, 3%.

STATUS IN THE WORLD TODAY

Rumania, formerly one of the most anti-Communist of all East European countries, is today outwardly one of the most docile of the Soviet satellites. Although the U.S.S.R. has absorbed the long-disputed region of Bessarabia, it has restored Rumanian sovereignty over Transylvania, which was taken from Hungary after World War I but then reapportioned between the contending states by Hitler in 1940. The policies of the Communist party have been relatively cautious and, although not easy to bear, have fallen far short of the massive attempt at large-scale social transformation undertaken in Hungary and have also lacked the vicious terroristic character of Communist rule practised in that neighboring country.

One reason for the cautious policies may be the relatively small number of Rumanian Communists—they counted fewer than 500 adherents in 1944. This has meant the absence of a cadre of well-trained party members to fill government jobs and may well be the reason that the party leadership has been far less affected by purges and show trials than any other satellite Communist party. Rumania's strategic position is another reason why

the U.S.S.R. is interested in keeping peace there. It controls a long navigable stretch as well as the mouth of the Danube, and its oil deposits near Ploesti make it an important source of supply of a commodity not otherwise abundant in that part of the world.

Concessions from the Russians in the form of economic assistance have been made to alleviate a number of chronic economic difficulties. If Rumania is not a show example of Communist achievements, it displays far less militancy in imitation and supporting the Soviet Union than East Germany or Czechoslovakia, it is a hotbed of troubles either. It is an island of relative tranquillity in an otherwise agitated part of the Soviet empire.

HISTORY AND GOVERNMENT. Most of Rumania was the Roman province of Dacia from about A.D. 100 to 275. From the sixth to the twelfth centuries, wave after wave of barbarian conquerors—Vlachs, Bulgarians, and others—passed over the area. It became a kingdom in 1881.

The gains of World War I, making Rumania the largest Balkan state, included Bessarabia, Transylvania, and Bukovina. The Banat, a Hungarian area, was divided with Yugoslavia.

In 1926 Crown Prince Carol renounced his rights to the throne, and when King Ferdinand died on July 20, 1927, Carol's son, Michael (Mihai) became King under a regency. However, Carol returned to exile in 1930, was crowned King Carol II, and gradually became a powerful political force in the country. On Feb. 10, 1938, he abolished the democratic constitution of 1923. On June 21, 1940, the country was reorganized along Fascist lines, and the Fascist Iron Guard became the nucleus of the new totalitarian party. On June 28, 1941, the Soviet Union occupied Bessarabia and northern Bukovina. By the Axis-dictated Vienna Award of 1940, two-fifths of Transylvania went to Hungary, after which the King dissolved Parliament and granted the new Premier, Ion Antonescu, dictatorial power. Carol then abdicated and went into exile. Rumania subsequently signed the Axis Pact on Nov. 23, 1940, and the following June joined in Germany's attack on the U.S.S.R., reoccupying Bessarabia. Following the invasion of Rumania by the Red Army in Aug. 1944, King Michael staged a coup d'état which ousted the Antonescu government. An armistice with the U.S.S.R. was signed Sept. 12 in Moscow.

Elections held Nov. 19, 1946, resulted in a victory for the Communist-dominated government bloc. Michael abdicated Dec. 30, 1947, and thereafter the country was declared a "people's republic."

ECONOMIC CONDITIONS. Rumania is pre-eminently agricultural, with about 80 per cent of the population engaged on the soil. Wheat, rye and other grains, it is one of the richest countries of southeastern Europe. The largest acreage is usually devoted to corn and wheat. Other crops are flax, fruit, vegetables, potatoes, sugar beets, sunflower seeds, tobacco, and grapes. Livestock raising is also important. In 1958, a gas pipeline connecting Rumanian oil-gas fields with Hungarian centers was opened.

Agricultural reform measures effected in 1945 provided for the distribution of es- tates over 50 hectares (123.6 acres) in 1945 into 12½ hectares to each peasant.

Industrialization made considerable progress under a 5-year plan covering the years 1951-55, which emphasized the iron, steel, metal, machinery, and other heavy industries. The Soviet half-share in Soviet-Rumanian joint companies, which control the major industries, was sold to Rumania in 1948. Industries directly connected with agriculture, such as flour milling, distilling, and weaving, are still of basic importance. Among the most important industries are food processing, textiles, metals, chemicals, wood, and paper. All but small businesses enterprises are nationalized.

Foreign trade is under complete government control. Principal exports are petroleum products, cereals and cereal products, wood and wood products. Leading imports are iron and manufactures, machinery and motors, vegetable fibers and textiles.

PHYSICAL FEATURES AND RESOURCES. The Carpathian Mountains divide Rumania into an upper half from north to south and a lower half near the center of the country. The Transylvanian Alps, running east and west.

To the north and west of these ranges lies the Moldavian plateau, and to the south are the plains of Moldavia and Wallachia. In its last 190 miles, the Danube flows through Rumania only. It empties into the Black Sea in northern Dobruja, just south of the border of the Soviet Union.

One of the most valuable of Rumanian resources is oil, produced chiefly in the Ploesti region about 35 miles north of Bucharest.

Natural gas from Transylvania is the second most important mineral. Other important minerals are iron ore, lignite, coal, gold, and silver. Uranium deposits have been reported.

Area: 8,260 square miles.*
Population (est. 1959): 2,520,000.
(mestizo, 78%; Indian, 11%; white, 11%).
Density per square mile. 305.1.
President: José Maria Lemus.
Principal cities (est. 1959): San Salvador, 221,708 (capital); Santa Ana, 67,255 (coffee); San Miguel, 32,204 (coffee, henequén).
Monetary unit: Colón.
Language: Spanish.
Religion: Roman Catholic.

* Land area: 8,165 square miles.

STATUS IN THE WORLD TODAY

El Salvador, the smallest of the 21 American republics, is a democracy which has enjoyed relative political and economic stability during the past ten years. Although most of the land is held by a few score wealthy families and cultivated by very poor workers, the country has been undergoing a moderate social revolution with a program of irrigation and the settlement of small farmers on reclaimed land, enactment of labor and social security legislation, and the growth of a labor movement. It is also one of the most densely populated countries in this hemisphere and has started new roads to open up unexploited land along the Pacific coast to relieve the population pressure elsewhere.

For the past 20 years or so, El Salvador has had a balanced budget and a favorable balance of trade, although the latter has been growing smaller with the fall of coffee prices on the world market. The government now has a 10-year, \$156-million development program to diversify agriculture and build schools, homes, and light industry. A new tariff law was enacted in 1958 to encourage domestic manufacturing, and in the past five years more than 100 industrial plants have been established as power facilities have been expanded.

HISTORY AND GOVERNMENT. Pedro de Alvarado, a lieutenant of Cortez, conquered El Salvador in 1525. El Salvador struck out as an independent republic in 1839 after the dissolution of the Central American Union. Its history was that of Central America during the early period and its independent career for several decades was marked by numerous revolutions and wars against other Central American countries.

In Jan., 1931, the first free election in 20 years brought in Arturo Araujo as President. He was overthrown before the year was over. General Maximiliano Hernández Martínez, his successor, remained in power until May, 1944, when a general strike forced his resignation. The next regime,

also militarist-led, lasted only five months, and was succeeded March 1, 1945, by a regime headed by Salvador Castañeda Castro, who was ousted Dec. 14, 1948, by a revolutionary junta. Major Oscar Osorio, one of the junta's members, was named President in the March, 1950, elections. Col. José María Lemus was elected to succeed him in the March 1956 elections.

The Constitution provides for a President, popularly elected for six years and ineligible to succeed himself, and a unicameral legislature elected by universal popular vote for two years.

Mestizos (mixed white and Indian) are the predominant racial group. There are no tribal Indians.

ECONOMIC CONDITIONS. El Salvador is one of the most intensively cultivated countries in Latin America. Coffee, which accounts for 72% of the total exports, is controlled in volume by a commission of officials and planters. Cotton is second in importance. In January, 1959, El Salvador followed Guatemala and Nicaragua in ratifying the Central American Common Market Treaty, thereby eliminating tariffs on a specified list of commodities.

El Salvador's largest national enterprise, the Lempa river hydroelectric project, began partial operation in 1953.

NATURAL FEATURES AND RESOURCES. Most of El Salvador is a fertile volcanic plateau about 2,000 feet high. There are several volcanoes, some still active, and many lovely crater lakes. It is the only Central American country without an Atlantic coastline.

Gold, silver, coal, copper, iron, zinc, mercury, and sulfur are the nation's chief minerals.

Forest resources, much smaller than in other Central American states, include dyewood, mahogany, cedar, and walnut. El Salvador is a leading source of balsam.

San Marino (Republic)

Area: 38 square miles.

Population (est. 1959): 15,000 (mostly Italian).

Density per square mile: 394.7.

Executive: two Regents selected every six months by the Grand Council.

Principal town: San Marino (est. pop. 2,000) (capital).

Monetary unit: Lira.

Language: Italian.

Religion: Roman Catholic.

HISTORY AND GOVERNMENT. San Marino, the oldest and smallest republic in the world, is one-tenth the size of New York City. It is entirely surrounded by Italy, in the Apennines near Rimini. According to tradition, San Marino was founded about A.D. 350 and had good luck

for centuries in staying out of the innumerable wars and feuds on the Italian peninsula.

San Marino hires its police and judges from Italy. It no longer confers titles of consideration, but it does derive revenue from the exporting of its post-stamps, which are changed often to philatelists buying. Other exports are honey, wine, and cattle, as well as building stone from Mount Titano.

Executive power is exercised by Regents two of whom are appointed every six months from the popularly elected Grand Council. In April, 1959, the Grand Council decided to grant women the vote in

Saudi Arabia (Kingdom)

Area: c. 617,760 square miles.

Population (est. 1956): 6,036,000.

Density per square mile: c. 9.8.

King: Saud ibn Abd al Aziz al Saud.

Prime Minister: Emir Faisal.

Principal cities (est. 1956): Mecca, 1,000 (joint capital, religious center); Jeddah, 160,000 (chief port); Riyadh, 150,000 (capital).

Monetary unit: Riyal.

Language: Arabic.

Religion: Moslem.

STATUS IN THE WORLD TODAY

Saudi Arabia, which receives most of its income in oil royalties from an American consortium and which has given the United States the right to maintain a large air base at Dhahran, has not followed the lead of some of its sister states in accepting any sort of assistance from the Soviet Union. It is maintaining a policy of neutrality in the Arab world although in 1957 it protested against Egypt's meddling in the internal affairs of other states and in turn was accused by Nasser of trying to prevent the unification of Egypt and Syria and of plotting to assassinate him.

The huge income from oil has been at the beginnings, however small, of a revolution in this feudal kingdom. Saudi Arabia has placed the emphasis on internal rather than foreign policy problems. Ninety percent of its inhabitants receive no profit from the oil riches, and almost none has been spent for public health, education and other social services. A middle class, which never existed before, is springing up as a result of the oil industry and bringing about social change. In the hierarchy itself there is one faction which wants to continue the old free-spending ways for the benefit of the rulers, another believes that country should have some measure of financial stability and some modernization of governmental

y. A financial crisis led to a palace revolution in March, 1958, and Crown Prince Faisal, the leader of the latter, took control of the government and to restore financial stability.

RY AND GOVERNMENT. The kingdom of Saudi Arabia, which occupies most of the Arabian peninsula, is almost entirely the creation of King Ibn Saud (1876-1953). Its earlier history is that of the Wahhabi. Descendant of earlier Wahhabi Ibn Saud seized the emirate of Riyadh in 1901, and set himself up as the head of the Arab nationalist movement. The kingdom of Saudi Arabia was one of the original members of the U.N. and joined the Arab League in 1945. King Ibn Saud died Nov. 9, 1953, and was succeeded by Saud (born 1905), the eldest of his sons.

Saudi Arabia is a nearly absolute monarchy. A Council of Ministers headed by the Prime Minister was formed in Oct., 1953. Faysal and Nejd are under separate administrations. Tribal organizations are still important. There is a small army. In 1958, King Saud turned over to his son, the Emir Faysal, full powers to lay down the state's internal, external, and judicial policies, but he retained veto power. There are no political parties.

A majority of the inhabitants are nomads following their flocks in the desert. The population is predominantly Sunni Moslem, and the religious law of Islam is the common law of the country. Mecca and Medina are the leading religious centers of Islam and the annual influx of pilgrims to those cities is the most important commercial activity. The oil industry.

Saudi Arabia's desert climate restricts agriculture to the highlands of Asir and the oases. Dates are the staple crop; fruits, and vegetables are also grown. Sheep, and goats are raised and animal products, such as hides, wool and ghee (clarified butter), are exported.

Discovered in 1936 in the province of Qassim along the Persian Gulf, is probably the U.S.-owned Arabian-American Oil Co. (Aramco). The main production areas are Dhahran, Abqaiq, Qatif, and Jubail. Production has skyrocketed since World War II. The company's expenditures and revenues are important invisible exports, and the revenues have greatly strengthened the financial position of the kingdom. Saudi Arabia receives one-half the company's profits. The oilfields are connected by pipelines to the port of Sidon, Lebanon.

Siam. See Thailand

Somalia (Republic)

Area: 262,000 square miles.
Population (est. 1960): 1,900,000.
Density per square mile: c. 7.3.
President: Aden Abdullah Osman.
Premier: Abdi Rashid Shermake.
Principal cities: Mogadishu, 75,000 (capital); Hargeisa (20,000 in hot season, 45,000 in cold season).
Monetary unit: Somalo.
Language: Somali.
Religion: Moslem.

STATUS IN THE WORLD TODAY

Somalia became an independent republic on July 1, 1960, through the union of two former colonies, British Somaliland and Italian Somaliland. Its population, the Somalis, are Hamites or Cushites, who probably originally came from Arabia. They are mostly nomads. A poor country with no natural resources, its exports comprise bananas, hides and skins. It is estimated by the World Bank that Somalia will need \$6 million a year of outside help to keep going. Italy, which administered part of the country as a United Nations trusteeship for 10 years, has promised \$3.6 million and is expected to continue its subsidy for Somali bananas. The United States has granted \$5 million in aid since 1954.

Because of sentiment for the creation of a Greater Somalia involving union with the Somalis in Ethiopia, Kenya and French Somaliland, as well as unsettled boundary disputes between the new nation and Ethiopia, Somalia's foreign policy is viewed with suspicion in Addis Ababa. There is also the religious difference which separates the Christians in Ethiopia and the Moslems in Somalia and the problem of Ethiopia's only outlet to the sea—the railroad linking it with Djibouti, in French Somaliland.

HISTORY AND GOVERNMENT. British troops first came to Somaliland in 1884 to protect British interests there, and gradually a number of protectorates were established. From 1901-1920 much of the interior was inaccessible because of a holy war which did not end until the fanatic Somali mullah who led it died. The Italian protectorate was established in 1889 and was under British military administration from 1941-1949. Italy took over the U.N. trusteeship in 1950.

The National Assembly which met July 1, 1960, consisted of the 88 members of the Somalia (Italian) legislature and the 33 members of the British Somaliland legis-

lature. They elected a President, who will serve for a year until national elections can be held.

Spain (Nominal Monarchy) (España)

Area: 194,945 square miles.

Population (est. 1959): 29,894,000 (Spanish, Basque, Catalan).

Density per square mile: 153.3.

Chief of State: Francisco Franco y Bahamonde.

Principal cities (est. 1959): Madrid, 1,926,211 (capital); Barcelona, 1,477,811 (chief port, textiles); Valencia, 564,546 (silk, oranges); Seville, 441,837 (wines, iron ore); Saragossa, 288,222 (rail center); Málaga, 313,410 (seaport).

Monetary unit: Peseta.

Languages: Spanish, Basque, Catalan.

Religion: Roman Catholic.

STATUS IN THE WORLD TODAY

Although Spain is a dictatorship, its foreign policy is so dominated by one outstanding characteristic—unalterable opposition to communism—that it has become an ally of the United States in the cold war and is the site of important American naval and air bases. Because of Spain's favorable location in Western Europe, this is regarded by Western leaders as necessary strategy. Defenders of the policy that includes Spain as a military, but not ideological, ally point out that the choice of partners must be made on a realistic basis, as in the case of the Western democracies fighting with the U.S.S.R. against Nazi Germany. Critics claim that the cold war is essentially an ideological struggle between nations supporting and opposing the central idea of freedom, and that to include a dictatorship among the "free" nations weakens the meaning of such terms as "Free Europe" and the "Free World." In 1946, the U.N. General Assembly moved that Spain be debarred from membership in the U.N. "until a new and acceptable government is formed." But nine years later, with the strong support of the Latin-American countries and the Arab League, the Assembly reversed its position and admitted Spain to membership.

Spain, predominantly agricultural, still finds it difficult to maintain a balance between production and consumption of foodstuffs. Although she has important mineral resources and raw materials, she has remained backward industrially and is faced with chronic financial difficulties. Since 1945 there has been progressive economic deterioration, the cost of living has risen stupendously and the gap between rich and poor widened. American financial aid in return for the lease of military bases has relieved to some extent what is basically a weak economic system. Despite this weakness, Franco maintains his regime

because of his firm control of the Spanish army and, through the Falange, the totalitarian party, of police, secret police, trade unions. He is strongly supported by industrialists and financiers as well as all Spaniards who fear communism, especially another civil war.

In the summer of 1959, Spain was finally admitted to the Organization for European Economic Cooperation (OEEC).

When Pres. Eisenhower visited Europe August, 1959, he invited the Spanish Foreign Minister to London to discuss Spanish-American relationships with him.

HISTORY AND GOVERNMENT. Spain was originally inhabited by Celts, Iberians, and Basques, became a part of the Roman Empire in 201 B.C., when it was conquered by Scipio Africanus. In A.D. 476 the barbarian Visigothic leader, Attila, crossed the Pyrenees and ruled Spain, in the name of the Roman emperor, until then independently. In A.D. 711 the Moslems under Tariq entered Spain from Africa and within a few years completed the subjugation of the country. In the eighth century the Franks, led by Charles Martel, defeated the Moslems at Tours, thus preventing further expansion of Islam in southern Europe. Internal dissension of Spain and Islam invited a steady Christian conquest from the north.

Aragon and Castile became the most important Spanish states from the thirteenth to the fifteenth century, in time absorbing all the other peoples of Spain. Aragon and Castile were consolidated by the marriage of Ferdinand II and Isabella I. The Moslem stronghold, Granada, was captured in January, 1492, the same year in which Columbus, under the sponsorship of Isabella, discovered America. With Moslem control ended, Roman Catholicism was established as the official state religion. Jews (1492) and the Moslems (1502) were expelled from Spain at the cost of incalculable suffering and loss of life.

In the era of exploration, discovery, and colonization Spain won tremendous wealth and a vast colonial empire. The conquest of Peru by Pizarro (1533) and of Mexico by Cortes (1519) brought great prosperity to the motherland. The Spanish Hapsburg monarchy, through a series of wars, diplomatic negotiations, and marriages, became for a time the most powerful in the world.

In 1588 Philip II sent his Invincible Armada to invade England, but its destruction cost Spain her supremacy on seas and paved the way for England's colonization of America. Spain then rapidly lost the status of a second-rate power and never again played a major role in European politics.

World War I Spain maintained a policy of neutrality. In 1923 General Primo de Rivera became dictator. Alfonso XIII revoked the dictatorship, but a strong antimonarchist and republican movement led to his abdication in 1931. The new Constitution declared a workers' republic, broke up the estates, separated church and state, secularized the schools. The 1936 election returned a strong Popular Front party, with Manuel Azana as President.

Political chaos persisted. On July 1936, a conservative army officer in Morocco, Francisco Franco, led a mutiny against the government. The terrible civil war that followed lasted for three years and cost the lives of nearly a million men. In effect, a dress rehearsal for World War II. Franco was aided by Fascist Italy and Nazi Germany, while Soviet Russia helped the Loyalist side. Several hundred leftist Americans served in the Abraham Lincoln brigade on the side of the republic. The war came to an end when Franco took Madrid on March 28, 1939.

Francisco (b. Dec. 14, 1892) is *Caudillo* (dictator), Chief of State, Prime Minister, and head of the Falange Party. He pushes his policy into the foreground or background at will, depending upon political expediency. He appoints the cabinet. The Cortes, or parliament, established in July, may formulate legislation, but it is not satisfactory to the dictator.

A referendum held July 6, 1947, in which the people approved a Franco-drafted constitution law declaring Spain a monarchy. Franco, however, is to continue as Chief of State, and upon his death or injury the government and a Council of Regency constituted by the law are to elect as King "that person of royal blood who is most qualified by right," subject to the approval of the Cortes. The law gives to Franco the right to nominate his successor, subject also to the approval by two-thirds vote.

ECONOMIC CONDITIONS. Livestock in 1955, 3,011,000 cattle, 16,312,000 sheep, and 5,980,000 hogs. Wool production in 1957 was 13,400 metric tons, greasy

Principal customers in 1958 included France, West Germany, the United States, and Italy; leading suppliers, the United States, France, Britain, and West Germany. Major exports in 1958 were iron ore and wool. Principal imports were raw cotton, mineral products (especially fertilizer), machinery, and vehicles.

Industry. The textile industry, concentrated in Catalonia, leads all others. The food and chemical industries are also important, as well as pig iron and steel.

NATURAL FEATURES AND RESOURCES. Spain, less than 10 miles from Africa at the closest point, and separated from France by the Pyrenees, is generally a broad plateau sloping to south and east and crossed by a series of mountain ranges and river valleys.

SPANISH COLONIAL POSSESSIONS

Country	Area, sq. mi.	Population, est. 1955
Morocco		
Ifni	579	52,000
Ceuta, Melilla, Alhucemas, Chafarinas and Peñon de Velez	82	145,000
Spanish Sahara	105,409	19,000
Spanish Guinea	10,831	214,000

Minerals. Spain's mineral wealth, second to agriculture in the national economy, yields millions of tons of ore, including coal, lignite, iron ore (metal content 50%), potash ore, lead ore, zinc ore, and mercury. Spain also produces copper, gold, magnesite, sulfur, tungsten, phosphates, silver, and, reportedly, uranium.

Forests and Fisheries. Spanish forests yield lumber, pine resins, cork, and esparto. Some 100,000 persons work in the fishing, canning, and related industries.

OUTLYING ISLANDS. Off Spain's east coast in the Mediterranean are the Balearic Islands, which total 1,936 square miles. The largest is Majorca. Sixty miles west of Africa are the Canary Islands.

Sudan, The (Republic)

Area: 967,500 square miles.

Population (census 1959): 11,390,000.

Density per square mile: 12.8.

President: Ibrahim Abboud.

Prime minister: Ibrahim Abboud.

Principal cities (census 1956): Omdurman, 113,551 (commercial center); Khartoum, 93,103 (capital); El Obeid, 52,382 (gum arabic); Wad Medani, 48,131 (cotton, livestock); Port Sudan, 47,650 (chief port).

Monetary unit: Sudanese pound.

Languages: English, Arabic, Nilotic and Negro tribal dialects.

Religions: Moslem (Sunni), pagan, Christian.

STATUS IN THE WORLD TODAY

The Sudan is a new republic where a military coup has ended parliamentary rule because of political and economic instability. Yet the army itself is divided, with the senior officers pro-Western and anti-Egyptian and the junior officers more nationalistic or leftist. But having finally

achieved their independence, the Sudanese are determined to maintain it, so that their policy of neutrality extends not only to the West and to Soviet Russia but also to Nasser's Egypt. They are, however, cracking down on local Communists.

Having been ruled jointly by the British and the Egyptians for so long, the Sudan has no desire to become an Egyptian colony again, although there is considerable pro-Nasser sentiment in the northern, Moslem part of the country. Its present difficulties with Egypt stem from the use and diversion of the waters of the Nile River through the construction of the High Dam at Aswan. No agreement has yet been reached between the two countries on this project, which will flood some Sudanese territory. The Sudan controls the Upper Nile and, like Egypt, depends upon the Nile waters for its crops.

The Sudan's economic difficulties result mainly from its dependence on one export crop—cotton—and its failure to sell the 1956-57 crop and the subsequent pile-up of succeeding crops. It has been living on its reserve of consumer goods and, with a government deficit, has no funds for development. Early in 1959 it received \$30 million in aid from the U.S. and \$14 million from Britain. For some time it has rejected loans from the U.S.S.R. because it would have to spend the proceeds in the Communist bloc.

HISTORY. The early history of the Sudan (known as the Anglo-Egyptian Sudan between 1898 and 1955) is connected with that of Nubia, where a powerful local kingdom was formed in Roman times with its capital at Dongola. After conversion to Christianity in the sixth century A.D., it joined with Ethiopia and resisted Mohammedanization until the fourteenth century. Thereafter the area was broken up into many small states until 1820-22, when it was conquered by Mohammed Ali, Pasha of Egypt. Egyptian forces were evacuated during the Mahdist revolt (1881-98), but the Sudan was reconquered by the Anglo-Egyptian expeditions of 1896-98 and in 1899 became an Anglo-Egyptian condominium, which was reaffirmed by the Anglo-Egyptian treaty of 1936.

Egypt and Britain agreed in Feb., 1953, to grant self-government to the Sudan under an appointed Governor-General. Under the self-government statute of March 31, 1953, an all-Sudanese Parliament was elected in Nov.-Dec., 1953, and an all-Sudanese government was formed, headed by Ismail el-Azhari as Prime Minister. Under the agreement the Sudanese people were to determine their political status at the end of three years following the elections, but in Dec., 1955, the

Parliament declared the independence of the Sudan, which, with the approval of Britain and Egypt, was proclaimed Jan. 1, 1956. El-Azhari was replaced Prime Minister by Abdullah Khalil July 5. On March 20, 1958, the newly elected House of Representatives selected Abdullah Khalil to continue as Premier but in November, 1958, he was ousted. Lt. Gen. Ibrahim Abboud, Commander in Chief of the Sudanese Army, who seized control, dissolved Parliament and suspended the Constitution.

GOVERNMENT. The government is administered by the Prime Minister and Cabinet. A bicameral Parliament has a Senate of 50 members and a House of Representatives of 97 elected members.

ECONOMIC CONDITIONS. The northern part of the country is peopled by Arab-speaking Moslems, while in the backward south Negroid pagan tribes predominate.

Long-staple cotton, the chief export crop, is grown under irrigation in the Kassala and Tokar areas of the north in narrow strips along the main Nile. Durra, peanuts, corn, and oilseeds are grown elsewhere. Livestock raising is the occupation of most of the population.

Leading exports in 1958 were cotton, gum arabic, cottonseed, and peanuts. Leading customers were Britain (29%); U.S. (12%), and Egypt (16%); leading suppliers, Britain (26%), India (14%), and Egypt (8%).

NATURAL FEATURES AND RESOURCES. About one-fourth the size of Europe, the Sudan extends from north to south about 1,200 miles and west to east about 1,000 miles. The northern region is a continuation of the Libyan Desert. The southern region is fertile, abundantly watered and, in places, heavily forested. It is traversed from north to south by the Nile, all of whose great tributaries flow partly or entirely within its borders. The highest elevation is a mountain range parallel to the Red Sea, with heights of 4,000 to over 7,000 feet.

Salt is produced at Port Sudan, and gold deposits are worked at Gebel, on the Red Sea. Most of the world's gum arabic comes from the semiarid Kordofan area of the west. The southern forests are rich in fibers and tannins.

Sweden (Kingdom)

(Sverige)

Area: 173,564 square miles.
Population (est. 1959): 7,454,000 (95% ethnically all Swedish).
Density per square mile: 42.9.
Sovereign: King Gustavus VI Adolf

Minister: Tage Fritlof Erlander.
 Capital cities (est. 1958): Stockholm,
 (capital); Göteborg, 397,205 (chief
 shipbuilding); Malmö, 221,700 (sea-
 (est. 1956) Norrköping, 89,226 (tex-
 Hälsingborg, 74,947 (seaport).
 Primary unit: Krona.
 Language: Swedish.
 Religions: Swedish Lutheran, 99%;
 1%.

STATUS IN THE WORLD TODAY

Sweden, a traditionally neutral nation, has adopted a policy of neutrality in the world, although there is no doubt that world opinion favors the free world as opposed to a Communist dictatorship. Invited to the Atlantic pact in 1949, she declined, but has taken drastic steps to maintain her neutrality. Military service is compulsory from the ages of 18 to 47. The army consists of about 600,000 men in peacetime and a Home Guard of 100,000. The navy, with modern jets built in Sweden including at least 50 combat squadrons of jet planes, is the fourth largest in the world. Sweden is also one of the most advanced countries in the world in the production of atom-bomb-proof military shelters.

HISTORY AND GOVERNMENT. The earliest historical mention of Sweden is in Tacitus' *Germania*, where reference is made to the powerful king and his fleet of the Suiones. Toward the end of the tenth century Olaf Skötkonung established a Christian stronghold in Sweden. The initial union with Norway came in 1520 when the Danish King, Christian II, conquered Sweden and in the "Stockholm Blood-Bath" put leading Swedish personalities to death. Gustavus Vasa (1569-1600) broke away from Denmark and established the modern Swedish state.

Sweden played a leading role in the Thirty Years' War (1618-1648). By the Treaty of Westphalia (1648), Sweden obtained western Pomerania and some neighboring territory on the Baltic. In 1700 a coalition of Russia, Prussia, and Denmark united against Sweden and by the Peace of Nystad (1721) Sweden was forced to relinquish Livonia, Ingria, and parts of Finland.

During the Napoleonic wars Sweden allied with the gain of Norway from Denmark and with a new royal dynasty brought from Marshal Bernadotte of France, who became King Charles XIV (1809-1844). The artificial union between Sweden and Norway led to an unhappy marriage which was finally dissolved in 1905. Sweden maintained a position of neutrality during the World Wars.

Sweden is a constitutional monarchy. The king holds executive and judicial authority together with the Council of State, headed by the Prime Minister. The *Riksdag* consists of a First Chamber with 150 members elected by provincial and municipal councils and holding office for eight years, and a Second Chamber of 231 members popularly elected for four years. Men and women over 21 vote.

SOVEREIGN. Gustavus VI Adolphus, born Nov. 11, 1882, married (1) 1905, Princess Margaret Victoria (1882-1920); (2) 1923, Princess Louise Mountbatten (born 1889). To his first marriage was born Prince Gustavus Adolphus (born Apr. 22, 1906, killed in air crash Jan. 26, 1947), who was married in 1932 to Sibylla, Princess of Saxe-Coburg-Gotha; their offspring include a son, Carl Gustavus, the heir apparent, born April 30, 1946, and four daughters. Gustavus VI became King Oct. 30, 1950, on the death of his father, Gustavus V, who had reigned since 1907.

ECONOMIC CONDITIONS. *Agriculture.* Milk, butter, meat, grain, potatoes, and sugar beets are products of the broad fertile plains of the south; the north is limited to cattle raising and dairy farming.

The 1958 livestock estimates showed 244,000 horses, 2,543,000 cattle, 200,000 sheep, and 2,041,000 hogs.

Industry. The highly specialized machine industry produces separators, motors, electrical machines and apparatus, agricultural machinery, ball bearings, telephone equipment, and harbor works.

There are also large woolen, glass, and porcelain industries. Shipyards build for Swedish and foreign fleets. Timber and woodworking industries are extensive.

Trade. Leading exports in 1958 were wood pulp (14%), machinery and apparatus (13%), timber (10%), and iron ore (10%). Leading customers were Britain (16%), West Germany (14%), Norway (8%), and the Netherlands (6%). Leading suppliers were West Germany (23%), Britain (14%), the United States and Canada (11%), and Norway (4%). The principal imports included machinery, petroleum and products, textiles and clothing, and automobiles.

NATURAL FEATURES AND RESOURCES. Sweden slopes eastward and southward from its peak elevation in the Kjölen mountains along the Norwegian border. In the north are mountains and many lakes. To the south and east are central lowlands, and south of them are fertile areas of forest, valley, and plain. Along Sweden's rocky coast, chopped up extensively by bays and inlets, are many islands, the largest of which are Gotland and Öland.

Minerals. Sweden's iron ore deposits (metal content 60%) are among the world's richest. Those in central Sweden produce principally for domestic use, while the ones in Lapland to the north are worked largely for export, with much of the output being shipped through the Norwegian port of Narvik. Other major minerals are copper, gold, lead, arsenic ore, manganese ore, and silver. Coal production (304,800 tons in 1957) is comparatively small; imports of several million tons a year are therefore necessary.

Forests and Fisheries. About 60 per cent of Sweden is forested, mostly conifers, and there are vast forest products industries in the north. Sweden supplies a large percentage of the world's mechanical and chemical pulp.

Switzerland (Republic)

(Schweiz-Suisse-Svizzera)

Area: 15,941 square miles.

Population (est. 1959): 5,235,000 (Swiss, 91.2%; German, 3.6%; Italian, 3.1%; French, .9%; others, 1.2%—figures by place of birth).

Density per square mile: 328.4.

President (1960): Max Petitpierre.

Principal cities (est. Dec. 1956): Zürich, 422,000 (textiles, banking); Basel, 197,000 (rail center; Rhine port); Geneva, 164,400; Bern, 158,700 (federal capital).

Monetary unit: Swiss franc.

Languages: German, 71.9%; French, 20.4%; Italian, 6.0%; Romansch, 1.1%; others, .6%.

Religions: Protestant, 57%; Roman Catholic, 41%; Jewish, .4%; others, 1.6%.

* The vice-president ordinarily becomes president the next year. Vice-president in 1959: G. Lepori.

STATUS IN THE WORLD TODAY

In Switzerland, the classic home of neutrality, the foreign policy is carefully neutral in the cold war, even though Swiss traditions have long reflected the best of Western democratic development. Because of this traditional policy, Geneva was chosen after World War I as the seat of the League of Nations, and the country still constitutes the headquarters of a number of international organizations and is a great center for all sorts of international meetings and humanitarian associations. It has always shown great sympathy for foreigners in distress and has been a haven for political refugees, from Hungarian patriots of 1848 to those fleeing from Nazi Germany, Fascist Italy, and the Iron Curtain countries. Switzerland has entered into no military alliances and is not a member of the United Nations, although it has joined several international agencies of the U.N. Relations with

the United States have always been cordial and friendly, despite friction on such matters as American tariffs on Swiss watches and watch works.

HISTORY AND GOVERNMENT. Called Helvetia in ancient times, Switzerland in the Middle Ages was a federation of cantons of the Holy Roman Empire. Fashions around the nucleus of three German districts of Schwyz, Uri, and Nidwald, the Swiss Confederation slowly added cantons. In 1648 the Treaty of Westphalia gave Switzerland her independence from the Holy Roman Empire. French revolutionary troops occupied Switzerland in 1798 and named it the Helvetic Republic, but Napoleon in 1803 restored its federal government. At this time and again in 1815 the French- and Italian-speaking peoples of Switzerland were raised to political equality.

In 1815 the Congress of Vienna recognized and recognized the independence of Switzerland. In the revolutionary period of 1848 the Catholic cantons seceded and organized a separate union called the *Sonderbund*. In 1848 the new Swiss constitution established a union modelled upon that of the United States. The Federal Constitution of 1874 established a strong central government while maintaining large powers of local control in each canton.

The Swiss Confederation consists of 22 sovereign cantons, each of which has a veto power over federal legislation by referendum. Federal authority is vested in a bicameral legislature, the *Ständerat*, or State Council, consisting of 44 members, two from each canton. The lower house, the *Nationalrat*, or National Council, has 196 members, one from each 24,000 of the population, elected for four-year terms. Executive authority is lodged in a board called the *Bundesrat*, or Federal Council, of seven members elected by parliament. The Federal Council elects the President, who serves for a term of one year and is ordinarily succeeded by the Vice-President. The Federal Government regulates matters of war, peace, treaties, railroads, postal service, and the national mint. Each canton reserves for itself important local powers.

ECONOMIC CONDITIONS. In 1958 leading customers were West Germany (16%), the United States and Canada (12%), Italy (8%), France (8%), Britain (6%). Leading suppliers were West Germany (27%), the United States and Canada (14%), Italy (11%), France (11%), and Britain (5%). Leading exports were machinery (21%), clock watches (17%), chemicals and pharmaceuticals (14%), and textiles and clothing (11%). Switzerland has a world-wide reputation

highly skilled work in the manufacture of precision instruments, especially watches.

Rhine, navigable from Basel to the North Sea, is the principal inland waterway. Railways built over rugged terrain, and the construction of many bridges and tunnels, total about 4,900 miles, mostly completed.

NATURAL FEATURES: Most of Switzerland comprises a mountainous plateau bounded by the great bulk of the Alps on the south and by the Jura Mountains on the northwest. About a fourth of the total area of Switzerland is covered by scenic mountains and glaciers.

The country's largest lakes, Geneva, Constance (Boden See), and Maggiore, straddle the French, German-Austrian, and Italian borders, respectively.

Syria (U.A.R Province)

(as-Souriya)

Area: 71,227 square miles.

Population (est. 1958): 4,283,000 (Arab, Syrian, Kurdish, Turkish, French).

Density per square mile: 60.1.

President: Gamal Abdel Nasser.

Principal cities (est. 1956): Damascus,

(capital); Aleppo, 417,886 (north-

trading center); (est. 1954) Homs,

(farming, silk); Hama, 107,317

(in trading center).

Currency unit: Syrian pound (£S).

Languages: Arabic, Aramaic, French.

Religions (est. 1954): Moslem, 86.3%; Christian, 12.8%; Jewish, 1%; others, .1%.

STATUS IN THE WORLD TODAY

Since Syria has been absorbed by Egypt in the United Arab Republic, its status as an independent nation and its participation in world affairs is determined by the Egyptian regime in Cairo.

BRIEF HISTORY. Ancient Syria was conquered by the Assyrians about 1500 B.C., and after that by the Persians, Phoenicians, Assyrians, Chaldeans, Persians, and Greeks. From 64 B.C. to 636 A.D. the Arab conquest in A.D. 636, it was part of the Roman Empire except during the Crusader periods. The Arabs made it a trade center for their whole empire, but it suffered severely from the Mongol invasion in 1258 and fell to the Ottoman Turks in 1516. Syria remained a Turkish province until World War I.

The 1916 Anglo-French pact of 1916 put Syria in the French zone of influence. The League of Nations gave France a mandate over Syria after World War I, but the British were forced to put down several Arab nationalist uprisings. In 1930, France rec-

ognized Syria as an independent republic, but still subject to the mandate. After nationalist demonstrations in 1939, the French High Commissioner suspended the Syrian Constitution. In 1941, British and Free French forces invaded Syria to eliminate Vichy control. During the rest of World War II, Syria was an Allied base. Again in 1945, nationalist demonstrations broke into actual fighting, and British troops had to restore order. Syrian forces met a series of reverses while participating in the Arab invasion of Palestine in 1948. After Mar. 30, 1949, when the government was overthrown by Husni Zayim, there were several army coups d'état. That of Nov. 29, 1951, was engineered by Col. Adib Shishakly. Elected President in July, 1953, Shishakly was ousted on Feb. 25, 1954, by the army, which named Hachem Bey el-Attassi President. On Aug. 18, 1955, Shukri al-Kuwatly was elected President. In February, 1958, with the formation of the United Arab Republic through the union of Egypt and Syria, Gamal Abdel Nasser became President of the new Republic and Kuwatly, who had been instrumental in the Egyptian-Syrian negotiations, retired from public office.

Since October, 1958, Syria has been administered by an 11-member Executive Council the chairman of which was appointed by decree of the President of the U.A.R. Nasser also defined by decree the jurisdiction of the Executive Council.

ECONOMIC CONDITIONS. Agriculture and animal breeding are the main industries. Only half the land is arable, and only a third is actually cultivated. Most crops require irrigation. Leading crops include sorghum, olives, cotton, wheat, barley, grapes, lentils, and tobacco. Stock raising is important among nomads.

Leading exports in 1958 were raw cotton (41%), wheat (11%), wool (6%), and sheep (6%). Principal customers were Lebanon (21%), France (10%), and Italy (10%); leading suppliers, Britain (11%), the U.S. and Canada (9%), and West Germany (11%).

NATURAL FEATURES. Coastal Syria is a narrow plain. Back of that is a range of coastal mountains, and still farther inland is a steppe area. In the east is the Syrian Desert, and in the southeast next to Jordan is the Jebel Druze Range.

Thailand (Siam) (Kingdom)

(Muang Thai)

Area: 195,753 square miles.

Population (est. 1959): 21,881,000 (1937: 16,000,000). Ethnic groups: Thai, 90%*; Chinese, 3.4%; Indian and Malay, 3.4%; others, 3.2%*.

Density per square mile: 111.3.

Ruler: King Rama IX.

Prime Minister: Sarit Thannarat.

Principal cities (census 1947): Bangkok, 1,173,549 (capital, chief port); Khon Kaen, 153,934 (trading center); Buri Ram, 129,000 (farming); Thonburi, 118,682 (market center).

Monetary unit: Baht.

Languages: Thai (Siamese), Chinese.

Religions (census 1947): Buddhist, 95%; Moslem, 4%; others, 1%.

* Including about 2,500,000 of Chinese descent born in Siam.

STATUS IN THE WORLD TODAY

Although Thailand sided with the Axis during World War II and thereby avoided the devastation of modern warfare, it has pursued a consistently pro-Western course since 1945. With Pakistan and the Philippines, it is one of the three Asian members of the Southeast Asia Treaty Organization. Nevertheless, it has grown apprehensive over its proximity to Red China (there is also a minority of 3 million Chinese in Thailand), and in the last few years has shown unmistakable signs of its readiness to seek an accommodation with Peiping if ever this should become advisable. Thailand has received grants and credits from the United States but none from the Communist bloc thus far.

Since the abolition of the absolute monarchy in 1932, the country has been plagued by political instability, with a constant struggle for power among individuals and factions of a new middle-class oligarchy of young officers and civilian intellectuals. Nevertheless, significant progress has been made in the establishment of democratic institutions. For more than a quarter century Thailand has had a parliament in which elected representatives have discussed public questions and often subjected government policy to searching criticism, even if the cabinet has not yet been brought under parliamentary control. Civil liberties have never been wholly suppressed; Bangkok in particular has a lively and often outspoken press.

HISTORY AND GOVERNMENT. The Siamese first began moving down into their present homeland from the Asiatic continent in the sixth century A.D., and by the end of the thirteenth century ruled most of the western portion. During the next 400 years, the Siamese fought sporadically with the Cambodians to the east and the Burmese to the west. The British obtained recognition of paramount interest in Siam in 1824, and in 1896 an Anglo-French accord guaranteed Siamese independence.

A coup on June 24, 1932, changed the absolute monarchy into a representative government with universal suffrage. After

five hours of token resistance on Dec. 1941, Siam yielded to Japanese occupation and became one of the springboards for World War II for the Japanese campaign against Malaya. After the fall of its Japanese puppet government in July, 1942, Siam pursued a policy of passive resistance against the Japanese, and on Aug. 16, 1945, after the Japanese surrender, Siam repudiated the declarations of war it had made against Britain and the U.S. in 1942.

By a treaty signed with Britain and the U.S. on Jan. 1, 1946, Siam renounced all wartime acquisitions of Malayan territory and agreed that no canal linking the Gulf of Thailand with the Indian Ocean would be constructed across Siamese territory without British concurrence.

In October, 1958, Thannarat, who had been Supreme Commander of the armed forces, seized power in a bloodless coup. He proclaimed martial law, dissolved the National Assembly and the Council of Ministers, abrogated the Constitution of 1932, and banned all political parties. On Jan. 28, 1959, the King proclaimed a new interim Constitution and on February 1, 1959, he appointed a 240-member Constitutional Assembly to draft a permanent constitution. The Constituent Assembly, which included 181 members of the armed forces, immediately appointed Thannarat President.

RULER. Rama IX, who was born Dec. 28, 1927, second son of Prince Mahidol, Songkhla, succeeded to the throne on May 9, 1946, when his brother, King Ananda Mahidol, died of a gunshot wound. He was married on April 28, 1950, to Princess Kitiyakara; their son, Vajiralongkorn, born July 28, 1952, is heir apparent.

ECONOMIC CONDITIONS. Almost 90% of the population work at agriculture. Rice is the principal crop, the staple food and the leading export, and the basis of Thailand's whole economy and the key to its prosperity. Next in importance is rubber. Other products include coconuts, corn, tobacco, cotton, sesame, sugar cane, and soybeans. Livestock, poor in quality and quantity, is used mainly for hauling. Manufacturing is of little importance. Domestic business is largely controlled by Chinese.

Chief exports in 1958 were rice (41%), rubber (21%), and tin (4%). Leading trading partners were Malaya and Singapore, the United States, and Japan; leading suppliers, Japan, the United States, and Hong Kong.

NATURAL FEATURES AND RESOURCES. Thailand, about three-fourths the size of Texas, supports most of its population in the central alluvial plain, which is drained by the Chaopaya River and its tributaries. There are small deposits of many important minerals and some

tones. Only tin, gold, tungsten, and
e in commercial production.

ost 70 per cent of Thailand's total
rea is forested. Teak, the main for-
duct, covers over one-third of this
chiefly in the northern hill country.

4,348,000,000 fr. C.F.A. (3,580,500,000 to
France); imports, 3,755,000,000 (1,554,000,-
000 from France).

NATURAL FEATURES. The coastline, only
32 miles long, is low, sandy and without
harbors. The Togo hills traverse the central
section.

Togo (Republic)

: 21,500 square miles.

ulation: 1,162,000 (1,284 non-Afri-

ity per square mile: 54.5.

Minister: Sylvanus Olympio.

Principal cities: Lomé, 66,762 (capital).

etary unit: Franc C.F.A. (Comm-
Française de l'Atlantique).*

anguages: Evhé (south), Haoussa
, French, and other dialects.

ions: Animist, Christian, Moham-

Franc C.F.A. = 0.02 new Fr. fr.

STATUS IN THE WORLD TODAY

which became independent on
7, 1960, leans to the West but does
nt to be drawn into the cold war.
sent government believes in a union
tan states which leaves each member
ndent but which puts the smaller
on an equal footing with the
nes. Premier Olympio has let it be
that he will rely on the West for
ce and friendship and will continue
nd on France for financial aid and
ive troops.

RY AND GOVERNMENT. Brazilians
e first traders to settle in Togo. Es-
ed as a German colony (Togoland)
, the area was split between the
and the French as League of Na-
mandates after World War I and sub-
ly administered as United Nations
ships. The British portion voted for
ration with Ghana and is now part
country.

tions between Ghana and Togo have
eteriorating because Togoland
ana's alleged "expansionist aims."
the trouble lies in the artificial
ries of the two countries, with Ewe
en settled on both sides of the
. The southern half of Togo is pop-
principally by the Ewe and Mina
in the north the population is de-
largely from Hamitic tribes. A
of political refugees from Ghana
so fled to Togo.

MIC CONDITIONS. Agriculture and
are the chief industries, with cof-
ao, palm kernels and oil, cotton and
he principal exports. Togo also pro-
yewoods and oil palms and some
el. Exports (1959) amounted to

Trieste

This former free territory (293 sq. mi.)
on the northeastern Adriatic was divided
de facto between Italy and Yugoslavia
under the provisions of a memorandum of
understanding signed Oct. 5, 1954. Most
of the area (202 sq. mi.) went to Yugo-
slavia; the smaller (91 sq. mi.) but far
more densely populated part, including the
city of Trieste, went to Italy.

The free territory had been created
under the provisions of the Italian peace
treaty of 1947 and was to be under U. N.
protection. It proved to be impossible to
implement the treaty provisions, and
Yugoslav and Anglo-U.S. occupation forces
had continued the occupation begun
in 1945 of substantially the areas trans-
ferred to Yugoslavia and Italy, respec-
tively, in 1954.

Tunisia (Republic)

Area: 48,332 square miles.

Population (est. 1958) 3,852,000. (1946,
by place of birth: Tunisian, 89.9%;
French, 4.5%; Italian, 2.6%; others, 3%).
Density per square mile: 79.7.

President: Habib Bourguiba.

Principal cities (census 1956): Tunis,
410,000 (capital); Sfax, 65,635 (phosphate
port); Sousse, 48,172 (seaport); Bizerte,
44,461 (seaport and naval base).

Monetary unit: Tunisian franc.

Languages: Arabic, French, Italian.

Religion: Predominantly Moslem.

STATUS IN THE WORLD TODAY

The government of President Bourguiba,
although anti-French, is pro-Western in
its foreign policy and, of late, anti-Nasser.
In October, 1958, Tunisia broke off diplo-
matic relations with Egypt over inter-
ference in Tunisian affairs and an alleged
plot to assassinate Bourguiba. It is the
most Western-minded of the countries
of North Africa and would like to liqui-
date its special economic and financial
ties with France and be integrated eco-
nomically with the Western world. It
has received arms from the United States
after refusing Soviet offers and receives
about \$30 million a year in aid, a sum
roughly equal to one-quarter of its budget.
A plea for economic aid was presented to
President Eisenhower when he visited the
country on Dec. 17, 1959.

Tunisia's relations with France have rapidly deteriorated because of the rebellion in Algeria. The rebel Algerian "government" is situated in Tunis, and there have been numerous instances of French troops chasing rebels on Tunisian territory under the doctrine of "hot pursuit." The Bourguiba regime was further irritated by devaluation of the French franc in December, 1958, by the alleged maintenance of a "spy ring" by a group of French civil servants in the postal and telegraph administration, and has claimed that parts of the French Sahara actually belong to Tunisia. French troops have been withdrawn except at the naval base of Bizerte, and Tunisia is pressing for their evacuation. More than half the 180,000 French who lived in Tunisia in 1956 have returned to France.

HISTORY AND GOVERNMENT. Tunisia was settled by the Phoenicians and Carthaginians in ancient times. Except for an interval of Vandal conquest in A.D. 439-533, it was part of the Roman Empire until the Arab conquest of 648-69. Then it was ruled by various Arab and Berber dynasties until the Turks took it in 1570-74. The founder of the present dynasty, Hussein ben 'Ali, was proclaimed sovereign by the occupation troops in 1705 and later succeeded in making the office hereditary, although subject to nominal Turkish sovereignty.

Throughout much of its history, Tunisia was essentially a pirate state, preying on Mediterranean shipping. In modern times, Italy became predominant economically in the area, but after French troops occupied the area in 1881, the Bey signed a treaty acknowledging a French protectorate.

Following the Allied landings in North Africa in 1942, Tunisia became a battleground, with the Axis forces pinched between the British 8th Army advancing from Libya and the U. S., British and French forces from Algeria. The Axis units surrendered in May, 1943, and Tunisia was turned over to the De Gaulle government.

Nationalist agitation forced France to grant internal autonomy to Tunisia in June, 1955, and to recognize Tunisian independence and sovereignty in March, 1956. Tunisia was admitted to the U. N. Nov. 12, 1956. The Constituent Assembly deposed the Bey on July 25, 1957, declared Tunisia a republic and elected Habib Bourguiba as the first President.

The executive power is vested by the Constitution in the President, who is elected for 5 years and may be re-elected for two additional terms. Legislative power is vested in a National Assembly elected by universal suffrage, but neither the President nor his Cabinet are responsible to the Assembly.

ECONOMIC CONDITIONS. Agriculture is the chief industry. Over a quarter of arable land is in wheat. Other important crops are barley, oats, corn, sorghum, beans, and peas. The Cape Bon region is largely devoted to citrus fruits, the southern oases to dates. In 1957 there were 3,026,000 sheep, 544,000 cattle, 1,185,300 goats, and 202,000 camels.

Leading industries include flour mill, oil refining, lead smelting, and distillation. Native industries include the spinning and weaving of wool, and the making of pottery and leather goods.

Tunisia, Algeria, and France are under a single customs union for a number of products.

Leading exports in 1958 were phosphates, wheat, wine, cement, iron ore, and oil. France took 62% of the exports and supplied 71% of the imports.

NATURAL FEATURES AND RESOURCES. Tunisia, at the northernmost bulge of Africa, thrusts out toward Sicily to mark the division between the eastern and western Mediterranean. It is mountainous in the north, covered by plains in the south, and projects southward to the Sahara.

Tunisia's extremely rich deposits of phosphates are mined principally in the Gafsa and Kef regions. The iron ore is of good quality (55% metal content). Other minerals are lead, zinc, mercury, manganese, copper, and salt.

Turkey (Republic)

(Türkiye Cumhuriyeti)

Area: 301,380 square miles.

Population (est. 1959): 26,800,000.

(Turkish, 94%; Greek, 2.2%; Bulgarian, 1.4%; Yugoslavian, .9%; others, 1.5%)*

Density per square mile: 89.2.

President: Lt. Gen. Cemal Gürsel.

Premier: Post now vacant.

Principal cities (census 1955): Istanbul, 1,214,616 (chief port, commercial center); Ankara, 453,151 (capital); Smyrna, 280,000 (seaport); Adana, 172,465 (agricultural center); Bursa, 131,336 (silk, carpet center); Eskişehir, 122,755 (trading center).

Monetary unit: Turkish pound (Lira).

Languages: Turkish, Greek, Bulgarian.

Religions: Moslem, 99%; others, 1%.

* 1935 by place of birth.

STATUS IN THE WORLD TODAY

Turkey, formerly labeled the "sick man of Europe," has achieved the transition from Eastern empire to Western nation envisaged for it by Kemal Atatürk and in the process has become one of the staunchest Western allies and a member of NATO. As a target for centuries

the imperialist expansion—whether or Communist—its people are nationalistic, anti-Russian. It has a tough, 500,000-man army, mechanized with American equipment, and has agreed to accept bases for American guided missiles and rockets. Relations with Greece, the nation with which it constitutes the southern flank of the NATO, have improved since solution of the Cyprus problem. It is a member of the United Nations, the Treaty Organization (CENTO), the Balkan Pact, and the Eastern European front-tier alliance against Soviet aggression, and with Greece and Yugoslavia a partner in the Balkan pact. In time of crisis it is in a position to close the Dardanelles to Soviet warships. During the Korean conflict, it sent a brigade to fight with United Nations forces.

Economically, Turkey has been weakly affected by inflation, in part a by-product of rapid industrialization, with most facilities dependent upon imported materials. In the fall of 1958 it received a \$359 million loan from the United States and the World Bank to assist its economic recovery program. With exports lower than had been expected, exporters are now receiving government subsidies. Twenty-one companies, most of them American, are engaged in oil.

The economic difficulties led to criticism of the government of Premier Menemchioglu, who responded by suppressing freedom of the press, arresting opposition deputies, and taking other unconstitutional and undemocratic measures. Repeated student demonstrations against the repressive government finally led to Army intervention in the spring of 1960. The Army officers who took power promised to restore democratic government and civilian rule.

OTTOMAN EMPIRE AND GOVERNMENT. The Ottomans first appeared in the early thirteenth century A.D. Under the leadership of the Seljuk Sultans, they gradually spread their hegemony over most of the Near East and the Balkans, capturing Constantinople in 1453 and storming the gates of Vienna in the seventeenth century. At the height of its power, the empire stretched from the Persian Gulf to the frontiers of Persia and from the shores of the Caspian Sea to Oran in Algeria.

The defeat of the Turkish navy at Lepanto in 1571 by the Holy League and of the Ottoman forces besieging Vienna in 1683 marked the decline of Ottoman power, reducing Turkey to the status of a pawn in European political maneuvers. Russia moved into the Balkans in the eighteenth century and made herself official protector of the Ottoman Christians. Fear of a Russian attack on Constantinople prompted England to declare war on Russia, and the Crimean War (1853-56) followed. As

a result of the Russo-Turkish war (1877-78), Bulgaria became practically independent, and Rumania and Serbia threw off their nominal allegiance to the sultan. Further defeats were suffered by Turkey in a war with Italy (1911-12) and in the Balkan Wars (1912-13). Meanwhile, a revolt led by the Young Turks, an organization of youthful liberals, had forced the abdication of Sultan Abdul-Hamid in 1909 and established a constitutional regime.

On Aug. 2, 1914, at the outbreak of World War I, a secret alliance was signed between Germany and Turkey, whose army was advised by a German military mission, and in September the Allies declared war on Turkey. Turkish forces successfully defended the strategic Dardanelles, but British forces seized Palestine, Mesopotamia, and Syria; and the Hejaz revolted. By 1918 Allied forces held the territory along the Dardanelles and the Bosphorus, and later Greek forces occupied Smyrna.

In 1919 the new Nationalist party, headed by Mustafa Kemal, was organized to resist the Allied occupation, and in 1920 a National Assembly elected Mustafa Kemal President of both the Assembly and the government. Under his leadership, the Nationalist government was recognized by foreign powers, the Greeks were driven out of Smyrna, and other Allied forces were withdrawn. The present Turkish boundaries (with the exception of Alexandretta, ceded to Turkey by France in 1939) were fixed by the Treaty of Lausanne (1923) and later negotiations. The caliphate and sultanate were separated and the sultanate abolished on Oct. 1, 1922. On Oct. 29, 1923, Turkey formally became a republic with Mustafa Kemal, who took the name of Kemal Atatürk, as its first President. The caliphate was abolished on March 3, 1924, and Atatürk proceeded to carry out an extensive program of reform, modernization, and industrialization.

The Montreux Convention (1936) gave Turkey sole responsibility for the defense of the Dardanelles.

General Ismet İnönü was elected to succeed Kemal Atatürk on the latter's death in 1938 and was re-elected in 1939, 1943, and 1946, but was defeated in 1950 and succeeded by Celâl Bayar. On Oct. 19, 1939, a mutual assistance pact was concluded with Britain and France. Turkey followed a neutral course during most of World War II, but on Feb. 23, 1945, she declared war on Germany and Japan, but took no active part in the conflict. After the abrogation of the Soviet-Turkish non-aggression pact in March, 1945, Turkey was subjected to Soviet pressure for a share in the control of the Dardanelles. To assist Turkey in effecting modernization necessary for the preservation of its national integrity, the United States in

1947 agreed to advance \$100,000,000, all of which was to be used for the armed forces or to a lesser extent for economic projects directly related to Turkish defense. Turkey also received aid under the European Recovery Program. It became a full member of NATO in 1952.

The Constitution, as amended in 1937, defines the state as "republican, nationalist, populist, étatist, secular, and revolutionary." The President is chosen from the deputies of the National Assembly; his term of office is identical with the life of each Assembly. The members of the Assembly are elected by universal suffrage for a term of four years. According to the Turkish Constitution, the Assembly exercises the executive power through the President and the Council of Ministers (cabinet) which is appointed by him.

The Republican People's party, which had been in power since 1923, was overwhelmingly defeated in free elections held May 14, 1950, by the Democratic party.

In the October, 1957, elections the Democratic Party obtained a total of 424 seats in the Grand National Assembly, while the Republican People's Party gained a total of 178 seats.

ECONOMIC CONDITIONS. *Agriculture and Industry.* Agriculture is the principal economic activity, engaging about 65 per cent of the population. Only about 20 per cent of the land is under cultivation, but the government has made great efforts to modernize and improve farming. The most important cash crop is tobacco. Cotton is grown in the south of Asia Minor, while figs come exclusively from the Smyrna region. Grain crops include wheat and barley. Turkey is a leading exporter of olive oil; the Brusa region and the Ionian coast are the principal areas of cultivation. Opium poppies are grown in the Smyrna, Malatia, and Tokat regions.

Turkey is rich in livestock. The most important animal is the goat, of which there were 21,045,000 in Dec., 1953, including the valuable Angora, which thrives on the uplands of the plateau. There were also (Dec., 1958) 29,209,000 sheep, 11,546,000 cattle, and 1,291,000 horses. Wool production in 1958 was 38,100 metric tons, greasy basis.

Staple industries have been established in iron, steel, textiles, paper, glass, sugar, and cement. A large proportion of the factories are government-operated. Istanbul is the major industrial area.

Principal customers in 1957 were the United States and Canada (20%), EPU countries (15%), and Britain (6%). Leading suppliers were the United States and Canada (28%), West Germany (16%), Britain (7%), and other EPU countries

(21%). Chief exports were tobacco (38%), hazelnuts (10%), cotton (7%), and chrome (6%); leading imports were machinery, iron, steel, fuel, and oil.

NATURAL FEATURES AND RESOURCES. Turkey is divided into two natural regions by the historic waterway formed by the Dardanelles, the Sea of Marmara, and the Bosphorus.

Turkey in Europe comprises an area about equal to the state of Massachusetts. It is hilly country drained by the Mar Mar River and its tributaries. Almost all the population is concentrated in and around the two important towns, Istanbul (Constantinople) and Edirne (Adrianople). Turkey in Asia, or Anatolia, about the size of Texas, is roughly a rectangle in shape with its short sides on the east and west. The center is a treeless plateau rimmed by mountains.

Minerals and Forests. Turkey's rich mineral resources are still comparatively undeveloped. Deposits of copper are found in the large field at Arghana, near the Syrian frontier. Turkey is also relatively rich in coal, with large deposits in the Ereğli region on the Pontic coast some 100 miles from Istanbul. A virtual world monopoly is enjoyed in meerschaum, found in the Eskişehir district. Other important minerals include chromite, petroleum, manganese ore, iron ore (metal content 65%), emery, and antimony.

Union of Soviet Socialist Republics

Area: 8,650,069 square miles.

Population (est. April 1959)*: 208,827,000 (1939: Great Russian, 58.4%; Ukrainians, 16.6%; Byelorussian, 3.1%; Uzbek, 2.5%; Tartar, 2.5%; Kazakh, 1.8%; Armenian, 1.3%; Georgian, 1.3%; and more than 100 others, 10.8%).

Density per square mile: 24.1.

Chairman of Presidium of Supreme Council: Leonid I. Brezhnev.

Premier: N. S. Khrushchev.

Principal cities (census 1959): Moscow, 5,032,000 (capital); Leningrad, 2,882,000 (industrial center, shipbuilding); Kiev, 1,102,000 (industrial center, Ukraine); Kharkov, 930,000 (iron and steel, coal); Gorki, 942,000 (industrial, transportation center); Tashkent, 911,000 (textiles, tobacco); Kuybyshev, 806,000 (industrial center, Volga port); Novosibirsk, 887,000 (Siberian industrial center); Sverdlovsk, 700,000 (Ural industrial center); Tbilisi, 600,000 (building materials, tobacco); Stalin, 701,000 (coal, metallurgy).

Monetary unit: Ruble.

Languages: See Population, above.

Religions: Russian Orthodox (predominant), Moslem, Roman Catholic, Jewish, Lutheran.

STATUS IN THE WORLD TODAY

One of the two super-powers, the Soviet Socialist Republics has the cardinal foreign policy: the creation of Communist governments in other parts of the world, whether by force or otherwise, all of them subservient to the interests of Moscow. All its energies are bent on this principal end; after more than four decades of Communist rule, the Russian people still awaits the proletarian paradise promised him. Raising his low standard of living must be subordinated to the task of industrialization and the heavy burden placed on the economy by military expenditures—estimated at some 15 per cent of annual commitment of resources.

During World War II, this expansion of the Communist empire was accomplished by conquest and subversion and resulted in the creation of the belt of satellite states in Eastern Europe and the gradual assumption of power by the Reds in China. Now, in the specter of the end of all civilization—any atomic war, the Soviet formula of freezing the status quo in Europe, the Soviet Union feels that her "security" lies in the control of neighboring countries, in the peaceful penetration of the "underdeveloped" countries by using economic, political, and propaganda methods.

The Soviet Union views the "colonial and semi-colonial" nations as the area of greatest opportunity for the present. It poses as the champion and defender of peace and national independence, as the protector of the small and recently colonial states in their contest with imperialism, as a model of growth for the previously backward country. Yet, in reality, while pretending to assist the nations against "imperialism," the Soviet Union itself is as imperialistic as, if not more so than the tsarist regime it replaced. Its policy of imperialistic penetration of the nations which it—temporarily—is camouflaged by a skillful propaganda campaign for peace and coexistence. Its intentions are to take control of the nations and to eliminate whatever free institutions exist, even as they do in such Eastern European countries as Latvia, Lithuania, Estonia, Hungary, Rumania, and Czechoslovakia. If penetration is not enough, it helps the Red China, support small "civilized" nations which can be kept from turning into war, or even military assistance on a large and more open scale, as in Korea. The primary method now is to under-construct industrial and social engineering ranging from steel mills and dams to schools and stadiums and by stepping up international beneficial trade, although the

benefits often flow only in the direction of Moscow.

Foreign policy in the Soviet sense is not limited to diplomacy. In addition to conventional international contacts through ambassadors and ministers, Moscow uses the international network of Communist parties and so-called front organizations as means of pressure and vehicles for the expansion of the Soviet orbit throughout the world.

Probably the greatest lasting accomplishment of the past forty years is the forced economic growth of the Soviet Union from a relatively backward state to a leader in many branches of economy, second only to the United States. In this giant effort the major emphasis has been on expansion of heavy industry, armaments, and machine tools, and a strikingly small proportion of the resources invested has gone into services and consumer goods. Although the worker theoretically owns all these means of production, he has benefited little from them. One careful study put the Soviet worker's real wages in 1950 at one-sixth of the American worker's. There has been some improvement since then, but nothing so striking as the giant strides made during the same years in the production of iron and steel, the extraction of iron and coal, or the harnessing of electric and nuclear power.

Agriculture still remains the principal headache of the production bosses in the Kremlin. Collectivization has not solved the problem of food, and the forced deliveries demanded of the collective farms have had to be eased as an incentive to greater production. For a time the population grew faster than the food supply, and more and more people were leaving the farms for the cities. While the Soviet Union is still agricultural—55 per cent of the population remains rural—it may find it easier to export raw materials and industrial products in return for food than to produce enough sustenance for its own population.

The U.S.S.R. is in fact a country of contradictions, with strengths as well as weaknesses, some of which are difficult to detect and estimate because of restrictions on the flow of information imposed by the Soviet regime. But a definition of tsarist Russia indicates that in some respects little has changed in the last fifty years: a multinational empire marked by a strong central government, a theory of the right and duty of the state to guide the destinies of its subjects, and the absence of free political life.

HISTORY. The history of Russia begins with the perhaps legendary figure of the

Viking, Rurik, who according to tradition came to Russia in A.D. 862 and founded the first Russian dynasty in Novgorod. The various tribes were united by the spread of Christianity in the 10th and 11th centuries; Vladimir "the Saint" was converted in 988. During the 11th century the grand dukes of Kiev held such centralizing power as existed. In 1240 Kiev was destroyed by the Mongols, and the Russian territory was split into numerous smaller dukedoms, out of which three large centers emerged—Galicia, Moscow and Novgorod. The early dukes of Moscow extended their dominions through their office of tribute collector for the Mongols.

In the late 15th century, Ivan III, the reigning duke, acquired the rival kingdoms of Novgorod and Tver and threw off the Mongol yoke. Ivan IV, the Terrible (1533–84), first Muscovite duke to assume the title of Tsar, is considered to have founded the Russian State. He crushed the power of rival princes and boyars (great landowners), but Russia remained largely medieval until the reign of Peter the Great (1682–1725), grandson of the first Romanov Tsar, Michael (1613–45). Peter made extensive reforms aimed at westernization, and through his defeat of Charles XII of Sweden at the Battle of Poltava (1709), he extended Russia's boundaries to the west. Catherine the Great (1762–96) continued Peter's westernization program and also expanded Russian territory, acquiring the Crimea and part of Poland. During the reign of Alexander I (1801–25), Napoleon's attempt to subdue Russia was defeated (1812–13), and new territory was gained, including Finland (1809) and Bessarabia (1812). Alexander was the originator of the Holy Alliance, which crushed for a time Europe's rising liberal movement.

Alexander II (1855–81), pushed Russia's borders to the Pacific and into central Asia. Serfdom was abolished in 1861, but heavy restrictions were imposed on the emancipated class. Revolutionary strikes following Russia's defeat in the war with Japan forced Nicholas II (1894–1917) to grant a representative national body (Duma), elected by narrowly limited suffrage. It met for the first time in 1906. Nicholas continued in his reactionary course, however, and the overwhelmingly liberal Duma had little or no influence in the government.

World War I demonstrated the corruptness and inefficiency of the tsarist regime, although the call of patriotism held the poorly equipped army together for a time. Disorders broke out in Petrograd (now Leningrad) in March, 1917, and, following the winning over of the Petrograd garrison, the revolution was in full swing. Nicholas was forced to abdicate and was

later killed by the revolutionists. A provisional government was formed, composed of both conservative and radical elements. This government, under the successive leaderships of Prince Lvov and Alexander Kerensky, a Menshevik or moderate socialist, soon lost ground to the radical or Bolshevik wing of the Socialist Democratic Labor party. Finally, on Nov. 7, 1917, the Second Revolution, engineered by Vladimir Lenin and Leon Trotsky. The humiliating Treaty of Brest-Litovsk (March 1918) concluded the war with Germany, but civil war and intervention by foreign powers prevented the new Communist government from gaining control of all Russia until 1920. A brief war with Poland occurred in 1920, but it resulted in a Russian defeat.

Soviet foreign policy—first featuring friendship with Germany and antagonism toward England and France and then, after Hitler's rise to power in 1933, by participation in the League of Nations and an anti-Fascist program—took another abrupt turn on Aug. 24, 1939, with the signing of a Soviet-German nonaggression pact. Territory seized from Poland (Sept. 1939) came part of the Ukrainian and Byelorussian S.S.R.'s; that secured from Finland at the conclusion of the Finnish war, 1939–40, part of the Karelian S.S.R. on March 31, 1940; that secured from Romania (Bessarabia and northern Bessarabia), part of the Moldavian S.S.R. on Aug. 2, 1940; and finally the formerly independent states of Estonia, Latvia, and Lithuania, occupied in June 1940, absorbed into the U.S.S.R. as the 15th, 16th, and 17th Soviet Republics. The annexations have not been recognized by the United States, Britain, and the majority of other nations.

Immediately following their attack (June 22, 1941), the Germans seized approximately 500,000 square miles of Soviet territory, but Soviet forces resisted heroically, aided by increasing amounts of matériel from the United States and Britain. The great Soviet counteroffensive in the Stalingrad area (Nov., 1942–Feb., 1943) marked the turning point. Soviet troops gradually pushed the Nazis back and unleashed their final great offensive on Jan. 12, 1945. The nonaggression pact with Japan (1941) was denounced in August 1945, and, following the declaration of war on Japan (Aug. 8, 1945), Soviet Far Eastern forces quickly occupied Manchuria, Karafuto, and the Kuriles.

Postwar territorial acquisitions included the Carpatho-Ukraine (12,617 sq. mi.) gained from Czechoslovakia June 29, 1945, incorporated into the Ukrainian S.S.R.; the Republic of Tannu Tuva in central Asia (64,000 sq. mi.), incorporated early in 1945 into the R.S.F.S.R.; Karafuto or so-

hain (13,935 sq. mi.) and the Ku-
 ounds (3,944 sq. mi.), occupied by
 groups in Aug., 1945, and incorpo-
 into the R.S.F.S.R.; the northern
 eastern Prussia (about 7,000 sq.
 aced under *de facto* Soviet admin-
 at the Potsdam Conference and
 rated into R.S.F.S.R.; the Petsamo
 of Finland, obtained *de jure* under
 7 treaty and incorporated into the
 R.; and Poland east of the Curzon
 9,860 sq. mi.), under terms of the
 Polish treaty of Aug. 16, 1945, in-
 into the Ukrainian and Byelo-
 S.S.R.'s.

Republics of the U.S.S.R.

nd capital	Area sq. mi.	Population Census 1959 (thousands)
S.F.S.R.		
ow)	6,593,391*	117,494
(Kiev)	232,046	41,893
stan (Alma	1,064,092	9,301
ssia (Minsk)	80,154	8,060
tan (Tash-	158,069	8,113
(Tbilisi)	26,872	4,049
an (Baku)	33,475	3,700
ia (Vilnius)	25,174	2,713
a (Chisinau)	13,012	2,880
Riga)	24,595	2,094
a (Frunze)	76,641	2,063
istan (Sta-	55,019	1,982
(Erivan)	11,506	1,786
nistan (Ash-	188,417	1,520
(Tallinn)	17,413	1,196

ing the Karelo-Finnish S.S.R., incorporated
 S.F.S.R. in July 1956.

NIIST PARTY. Real power resides
 Communist party of the Soviet
 CPSU), recognized by the consti-
 the vanguard of the masses and
 with authority which has per-
 it to emerge victorious from every
 potential challenge in the past forty
 hrushchev's victory, like Stalin's a
 on earlier, is the victory of the
 machine, and Moscow openly states
 e role of the party will continue
 ase, while "administrative and re-
 " functions (state bureaucracy,
 nd police) will "lose their former
 the Soviet state.

Bolshevik party has grown from a
 ship of some 300,000 in 1918 and
 0 in 1938 (after extensive purges),
 y 8,000,000 today. It is still a select
 thoroughly screened and subject to
 obligations but also special privi-
 s a group, it is the defender of the
 onary order, a model for all to em-
 d the holder of political monopoly.
 state, economic, and other institu-

tions may be decentralized and reorganized
 time and again, the party has retained—
 and, it is safe to say, will retain—its highly
 centralized, disciplined character as a
 matter of principle and of expediency.

The party organization has spawned al-
 most half a million cells ("primary party
 organizations"), which exist in virtually
 all factories, farms, and government offi-
 ces. Operating as essential "transmission
 belts," they are responsible to district
 (county) committees, which in turn are
 under the direction of regional (provin-
 cial) committees, with the lower officials
 in each instance named or approved from
 above. The higher strata are represented
 by party organizations on the level of each
 Union Republic and finally, at the top,
 the All-Union leadership.

Formally, infrequent Party Congresses
 are supreme in determining strategy and
 electing the Central Committee, which is
 the most powerful single body in the coun-
 try. It is composed of about 150 members
 and "candidate" members picked to "guide
 the entire work of the party" and "direct
 the work of Soviet organs." Under Stalin
 the Central Committee atrophied and be-
 came as much of a fiction as did other in-
 stitutions; under Malenkov it continued
 this ineffective existence. Khrushchev, on
 the other hand, appears to have "packed" it
 and restored it as a key instrument of gov-
 ernment.

The importance of the Central Commit-
 tee is enhanced by the fact that it directs
 a variety of staff departments, such as the
 "Agitprop" (responsible for "agitation and
 propaganda"), the Military Department
 (in charge of political control and in-
 doctrination in the armed forces), the For-
 eign Department (which, since the disso-
 lution of the Communist International in
 1943, is responsible for contacts with Com-
 munist parties abroad) and the so-called
 Cadre Department (which has the crucial
 say-so on personnel selection and promo-
 tion). In addition it supervises the tens of
 thousands of party schools throughout
 the country.

The Central Committee meets in plenary
 session only about two or three times
 a year. In the interim, much of the actual
 work is carried on (in addition to the
 staff departments just described) by its
 Secretariat and the party Presidium (until
 1952 known as the Politburo). The role
 of the Secretariat is suggested by the fact
 that Stalin was Secretary-General of the
 party during his rise to power, and Nikita
 Khrushchev, too, used the similar post of
 First Secretary of the party (which he
 gained in September, 1953) as the spring-
 board to dictatorship.

DEFENSE. The land, air, and sea forces
 are under control of the Defense Ministry.

Military service is compulsory; the initial training period varies from two to five years. The armed forces, which were estimated to have reached a peak of more than 15,000,000 men in 1945, numbered between 4,350,000 and 4,600,000 men in 1956, and were believed to have been reduced to approximately 3,400,000 by 1957. The strength of the army, including MVD and MGN troops (secret police organizations with paramilitary formations), was between 2,800,000 and 3,200,000 in 1956. The air force had between 750,000 and 800,000 men and 20,000 planes, including advanced models of jet fighters and bombers. The navy had between 600,000 and 750,000 men.

Information about the Red fleet is as vague as that about the army and air force. In Dec., 1956, it was believed to have three battleships, thirty-two cruisers, 150 destroyers, 250 frigates and escort vessels, 475 submarines, and many coastal and river craft, patrol vessels, minesweepers, and various other small ancillary craft. Naval construction was emphasized in postwar five-year plans.

ECONOMIC CONDITIONS. *Agriculture.* Formerly an agricultural country, the Soviet Union has grown since about 1920 into an industrial-agricultural power, with agriculture making great advances at the same time.

The Union's diverse climate permits the growing of the most varied crops.

The progress of the livestock industry during the fifth five-year plan was particularly disappointing.

Industry. Almost all industry in the Soviet Union is carried on by organizations owned or controlled by the state. Industrialization of the country has been a major objective of its leaders. Completion of the first two five-year plans (1928-32, 1933-37) and of most of the third (1937-42) saw a great increase in the volume and versatility of Soviet industry.

The large-scale evacuation of plants to the East and the construction of new plants there during World War II, coupled with the eastward orientation of industry prior to the war, has shifted the balance to newly developed regions in Central Asia and Siberia from the Moscow-Leningrad area and the Ukraine. The new regions are now the center of Soviet industrial power, accounting for almost all magnesium and aluminum production, and more than 60 per cent of the pig iron and steel production. The production of consumers' goods continues to be subordinate to the production of heavy capital equipment.

Large increases in production were reported under the fourth and fifth five-year plans and further increases were projected under the sixth five-year plan.

Foreign Trade. Soviet foreign trade is a state monopoly, and foreign goods purchased in accordance with an overall plan conducted under the supervision of the Foreign Trade Ministry.

No complete trade statistics have been issued since 1938.

According to official reports, the main exports in 1958 were machines and equipment (18.5%); metals, cotton, grain, and petroleum and products; chief imports were machines and equipment (24.5%); foodstuffs (14.9%); and consumer goods (14.4%).

NATURAL FEATURES AND RESOURCES. The U.S.S.R. is the largest unbroken political unit in the world, occupying more than one-seventh of the land surface of the globe. The greater part of its territory is a vast plain stretching from eastern Europe to the Pacific Ocean. This plain, relieved only occasionally by low mountain ranges (notably the Ural Mountains), consists of three zones running east to west: (1) the frozen marshy tundra of the Arctic; (2) the more temperate forest zone; and (3) the steppes or prairies to the south, which in southern Soviet Asia become sandy deserts. The topography is more varied in the South, particularly in the Caucasus between the Caspian Sea and the Black Sea, and in the Tien-Pamir mountain system bordering Afghanistan, China, and Mongolia. Mountains (Siberian, Kamchatka, and Kolyma) and great rivers (Amur, Yenisei, Lena) also break up the vastness of the plain in Siberia.

Minerals. The U.S.S.R. is probably the richest country in the world in mineral resources, containing deposits of almost every known mineral. It ranks among the top producing nations in coal, chromium, iron ore, petroleum, gold, copper, manganese, and other products. The richest mineral region is that of the Ural Mountains, which lacks only good coking coals.

Forests. With a forested area of about 2,500,000,000 acres, the U.S.S.R. possesses a large proportion of the world's timber reserves. Most of the forested area is in Siberia, but there are also valuable stands in the Caucasus. Plans were made in 1948 for the planting of huge forest belts 60 to 90 mi. wide in the southern steppes to protect fertile food-producing areas from the dry winds of the central Asian and Caspian deserts.

Fisheries and Furs. The rivers, lakes, and surrounding seas (except the Bering Sea) are rich in fish. The acquisition of the former Japanese fisheries in Karafuto and the Kuriles greatly increased output of the Far-Eastern fish industry. Trapping is an important secondary industry, especially in eastern Siberia.

D ARAB REPUBLIC. See Egypt,

D ARAB STATES. See Yemen

Uruguay (Republic)

ública Oriental del Uruguay)

72,152 square miles.

ation (est. 1958): 2,800,000 (1950:

9.1%; others, 10.9%).

ty per square mile: 38.3.

ent of National Council: Benito

pal cities (est. 1954): Montevideo,

(capital); Mercedes, 44,900 (farm-

er); Salto, 44,900 (cattle raising);

ú, 44,000 (meat packing).

ary unit: Peso.

age: Spanish.

on: Roman Catholic.

TUS IN THE WORLD TODAY

ay, unlike its neighbors, has been
he consistently democratic nations
h America. But like its neighbors,
w faced with an economic crisis.
y years a grazing nation, it began
strialize itself as a result of the
on and World War II. The new in-
produced goods at high costs,
required high tariffs to protect
ow one-third of the country's pop-
is engaged in industry. Govern-
employment has expanded to the
ere another one-third works for
ernment. Excessively early retire-
ges and other exaggerated provi-
the social security system, one of
t of its kind, have made it oner-
stly. There is also a great deal of
nt with the plural executive sys-
hereby a nine-member Executive
replaced the office of president.
has six majority and three minor-
bers.

Y AND GOVERNMENT. Juan Díaz
a Spaniard, discovered Uruguay in
t the Portuguese were first to set-
hen they founded Colonia in 1680.
long struggle, Spain wrested the
from Portugal in 1778. Uruguay
against Spain in 1811, only to be
ed in 1816-20 by the Portuguese
razil. Independence was reasserted
gentine help in 1825, and the re-
was set up in 1830.

endence, however, did not restore
a revolt in 1836 touched off
ifty years of factional strife with

occasional armed intervention from Argen-
tina and Brazil. Since 1900 there has been
marked social and economic progress, a de-
velopment which, as elsewhere, was inter-
rupted by the 1929 depression and result-
ant unrest.

Under the 1934 Constitution, as amended
in 1951, the executive power is exercised
by a National Council of nine members,
six of the majority and three of the
minority party, appointed for a term of
four years by the Senate and Chamber of
Deputies meeting in joint session. The
Presidency is rotated annually among
members of the majority party in the
Council. Members of the Senate and of
the Chamber of Deputies are elected by
popular vote for four years. A special
tribunal of five members appointed by
Congress arbitrates administrative dis-
putes between the National Council and
Congress.

ECONOMIC CONDITIONS. Cattle, sheep,
meat, and wool dominate the Uruguayan
economy. With nearly 80 per cent of its
grassy land devoted to grazing, in 1959
there were 21,300,000 sheep and 6,900,000
cattle. Wool production in 1959 was 98,000
metric tons, clean. With only about 5 per
cent of the land cultivated, a third of this
grows wheat, the chief crop (1957-58: 596,-
000 metric tons).

Uruguay slaughters more than two mil-
lion head of cattle and sheep a year, and
meat processing is the largest manufactur-
ing industry. There are many modern
plants for chilling or freezing meat and
plants for liquid extract of beef.

In value, wool was the chief export
(46%) in 1958, followed by meat (11%),
hides (7%), and wheat (12%). Chief cus-
tomers were the Netherlands (10%), the
United States (8%), and Brazil (18%);
leading suppliers, the United States (8%),
Brazil (18%), Venezuela (13%), and West
Germany (10%). Leading imports in-
cluded machinery, cotton, vehicles, fuels
and lubricants, textiles, and sugar.

NATURAL FEATURES. Uruguay, a low,
rolling plain in the south and a low plat-
eau in the north, has a 120-mile At-
lantic shore line, a 235-mile frontage on
the Río de la Plata, and 270 miles on the
Uruguay River, its western boundary.

Vatican City State (Stato della Città del Vaticano)

Area: 108.7 acres.

Population (est. 1958): 1,000 (Italian,
85%; Swiss and others, 15%).

Ruler: The Supreme Pontiff.

Monetary unit: Lira.

Languages: Latin, Italian.

Religion: Roman Catholic.

The Vatican City State, sovereign and independent, is situated on the Vatican hill on the right bank of the Tiber in northwest Rome. The area has been intimately associated with the history of the Roman Catholic Church since the time of the martyrdom of St. Peter. From it the Pope exercised temporal sway for many centuries over a large part of central Italy; in 1859 the Papal States comprised an area of some 17,000 sq. mi. During the struggle for Italian unification, from 1860 to 1870, most of this area became part of Italy.

By an Italian law of May 13, 1871, the temporal power of the Pope was abrogated, and the territory of the Papacy was confined to the Vatican and Lateran palaces and the Villa of Castel Gandolfo. The Popes consistently refused to recognize this arrangement, and by the Lateran Treaty of Feb. 11, 1929, between the Vatican and the Kingdom of Italy, the exclusive dominion and sovereign jurisdiction of the Holy See over the city of the Vatican was again recognized, thus restoring the Pope's temporal authority over the area. Accompanying the treaty were conventions regulating the position of the Catholic Church in Italy and providing for reimbursement to the Vatican in final settlement of the claims of the Holy See against Italy for the loss of temporal power in 1870-71.

The Supreme Pontiff Pius XII (Eugenio Pacelli), died Oct. 9, 1958. He was born at Rome, March 2, 1876, proclaimed Cardinal in 1929, and elected Pope on March 2, 1939. He was crowned on March 12, 1939. He was succeeded on October 28, 1958, by Cardinal Angelo Giuseppe Roncalli, who became Pope John XXIII.

The Pope has full legal, executive, and judicial powers. Executive power over the area is in the hands of a Governor appointed by the Pope.

The College of Cardinals is the Pope's chief advisory body, and upon his death the cardinals elect his successor for life. The cardinals themselves are created for life by the Pope.

The central administration of the Roman Catholic Church throughout the world is carried on in the Vatican by twelve congregations, three tribunals, and four offices. In its diplomatic relations with foreign countries, the Vatican is represented by the Papal Secretary of State.

The Vatican has its own railway station, postal facilities, coinage, newspaper, radio, and television system. In addition to the Vatican itself, which includes St. Peter's Square, extraterritorial rights are enjoyed in thirteen buildings in the city of Rome outside Vatican City.

Venezuela (Republic) (República de Venezuela)

Area: 352,142 square miles.

Population (est. 1959): 6,512,000* (tizo, 65%; white, 20%; Negro, 8%; Indian, 7%).

Density per square mile: 18.5.*

President: Romulo Betancourt.

Principal cities (est. 1957): Caracas, 661,275 (capital); Maracaibo, 319,689; Barquisimeto, 142,560 (sugar, coffee, mining); Valencia, 113,633 (farming center).

Monetary unit: Bolívar.

Language: Spanish.

Religion: Roman Catholic.

* Excludes tribal Indians.

STATUS IN THE WORLD TODAY

Venezuela, having overthrown the brutal and corrupt Perez Jimenez dictatorship in January, 1958, is now preoccupied with re-establishing democratic government. Governed by military dictators virtually since independence, it now has a popularly elected President and Congress. On the economic front, it is trying to diversify its economy and reduce its dependence on oil, which provides 95 per cent of its foreign exchange. It has put into operation an emergency economic plan of public works to absorb most of the 100,000 unemployed left by the Perez Jimenez regime. At the same time its Development Corporation has begun to extend loans to industries such as textiles, which need modern equipment in order to improve efficiency and productivity; to bolster some of the weaker elements of the nation's economy; and to plan for a broader economy, less subject to the vagaries of the oil business.

HISTORY AND GOVERNMENT.

Venezuela, a third larger than Texas, is the world's second greatest producer of oil, outranked only by the United States. Simón Bolívar, who led the liberation of much of the continent from Spain, was born in Caracas.

Columbus discovered Venezuela on his third voyage in 1498. A subsequent Spanish explorer gave the country its name, meaning "Little Venice." There were important settlements until Caracas was founded in 1567. With Bolívar taking leadership, Venezuela was one of the first South American colonies to revolt against Spain in 1810, but it was not until 1821 that independence was won. Federated at first with Colombia and Ecuador, the country became a republic in 1830, and then sank for decades into a condition of revolt, dictatorship, and corruption.

Venezuela has a bicameral Congress of 40 members of the Senate and the members of the Chamber of Deputies are elected by direct popular vote to four-year terms. The President is elected for

Vietnam, Republic of (South)

Area: 65,948 square miles.

Population (est. 1958): 12,366,291.

Density per square mile: 188.1.

President: Ngo Dinh Diem.

Principal cities (est. 1956): Saigon-Cholon, 1,794,360 (capital, chief port); Tourane, 100,978 (port, naval base); Hué, 90,682 (rice, sawmills).

Monetary unit: Piastre.*

Languages: Annamese, French.

Religions: Buddhist, Christian.

* 1 piastre = 10 French metropolitan francs.

STATUS IN THE WORLD TODAY

South Vietnam, which was not expected to survive for long after the Geneva Agreements which ended the savage Indo-China War, has survived and even flourished with a militantly anti-Communist policy and no nonsense about "neutralism." Three main factors account for this: (1) the courageous leadership of Ngo Dinh Diem, who contained and reduced to manageable proportions the threat of the Communist underground, and thereby established conditions of genuine security throughout his territory; (2) the massive political and material support of the United States, including the protection afforded by the Manila Pact (September, 1954) and assistance in receiving and integrating more than 850,000 refugees from the north into the life and economy of the country; and (3) the Communist decision, in line with the dictates of international strategy, to refrain from overt aggression or concerted efforts at subversion.

Economically, a land reform program has been instituted, land reclamation has proceeded apace and there have been important advances in the "infrastructure" (transportation, communications, technical training, etc.) of South Vietnam's underdeveloped economy. A modest beginning has been made in industrialization. American aid continues at high levels, averaging well over \$200 million annually, not including military hard goods. On the negative side of the ledger, there has been little relaxation of the authoritarianism and repressiveness that have characterized Diem's government from the beginning. Most civil liberties remain rigidly circumscribed, and functioning democracy remains more an ideal than a reality.

HISTORY AND GOVERNMENT. The young republic of Vietnam comprises the southern part of the former state of Viêt-Nam and includes all of the former state of Cochin-China and the southern part of Annam.

A presidential-type constitution promulgated on October 26, 1958, general elections for South Vietnam's National Assembly of 123 members represented a victory for President Diem's supporters. The constitution provides for a strong executive, and the President, is elected for five years, has veto power over all bills passed by the Assembly.

According to the Geneva Agreements of July, 1954, which ended the Indo-China war, North and South Vietnam were to be reunified through elections in 1956. President Diem flouted the provision of the Geneva Agreements on the ground that the French and not his government had been a signatory to them. The U.S. has vetoed the admission of South Vietnam into the United Nations.

About 90 per cent of the people derive their livelihood from agriculture, and being employed in growing rice and rubber. The Mékong delta is one of the leading rice-exporting areas in the world. Production in 1957 included rice, 3,192 metric tons; rubber, 69,700 tons. Other crops are tea, coffee, maize, tobacco, pepper, and pepper. Water buffalo are used chiefly for draft purposes.

Factories, centered in Saigon-Cholon are small and process goods for local consumption and agricultural and forest products for export. Most important are rice and sawmills.

In 1958 the chief export was rubber. Leading customers were France, the United States, and Cambodia; leading suppliers the United States, Japan, and France.

Mineral resources are limited. Coal is most important; some deposits of phosphates and gold exist.

Yemen (Kingdom)

Federated in 1958 with the U.A.R. (Egypt and Syria) to form the United Arab States.

Area: c. 75,290 square miles.

Population (est. 1959): 4,500,000.

Density per square mile: c. 59.8.

King: Ahmad ibn Yahya Hamid ed-Din.

Premier: Ahmad ibn Yahya Hamid ed-Din.

Principal cities (est.): Sana, 60,000 (capital); Hodeida, 30,000 (chief port); Aden, 12,000 (seat of government).

Monetary unit: Riyal.

Language: Arabic.

Religion: Moslem.

STATUS IN THE WORLD TODAY

Yemen, a backward little country until recently was closed to foreigners. It has lately been following the foreign policy of Nasser's Egypt. It has not joined his Union.

Republic but has become federated in what is called the United Arab Republic. When Nasser worked closely with the U.S.S.R., Yemen did too, receiving shipments of arms as well as a military and assistance from Red China. Nasser turned against Communists in Arab countries, Yemeni mobs displayed hostility toward the Soviets and the Chinese. When an acute famine threatened in 1959, however, Yemen received emergency shipments of wheat from the United States. It has also been carrying on intermittent minor warfare with the British in the undefined borders of the protectorate, where it claims that the sheikhdoms under British protection are actually part of Yemen.

HISTORY AND GOVERNMENT. The history of Yemen dates back to the Minaean Empire (1,200-650 B.C.). It accepted Islam in 628 A.D., and in the tenth century came under the control of the Rassidids, a branch of the Zaidi sect, which still rules. The Turks occupied the area from 1538 and from 1849 to 1918. Its sovereignty was confirmed by treaties with Saudi Arabia and Britain in 1927. Yemen was admitted to U.N. membership in 1947.

Yemen is an absolute monarchy. The ruler came to the throne in 1948, after his father, King Ibrahim, was murdered by his brother, King Muhammad (ruler). The king is both the political and temporal leader of the country. He traces his ancestry to Ali, son-in-law of the Prophet Mohammed. Yemen has a parliament or political parties.

The people of Arabia, the Yemeni highlanders, are well adapted to agriculture; they grow grain, fruit, vegetables, and Mocha coffee. Stock raising flourishes, particularly in the lowlands. Exports include coffee and hides.

Religions (est. 1952): Greek Orthodox, 49.6%; Roman Catholic, 36.8%; Moslem, 12.5%; others, 1.1%.

STATUS IN THE WORLD TODAY

Yugoslavia is every bit as much a Communist dictatorship as any of the Soviet satellites—a one-party state in which monopoly of power is exercised by a handful of men—but it differs from the satellites in one important respect: it has rebelled against the doctrine that Moscow, and Moscow alone, is the true fountainhead of all Communist ideology and has developed its own brand of home-grown communism. As a consequence it has come under heavy propaganda fire from all other Communist countries, including China, for its alleged ideological heresies which impaired the unity of the entire socialist camp. It has in its own way inflicted an embarrassing psychological defeat on the Kremlin by showing the satellites that there is a way to communism which does not demand blind obeisance to Moscow. Tito's independent stand was made possible by a number of factors: Soviet troops were not on Yugoslav soil; a territorial buffer existed between Yugoslavia and the U.S.S.R.; Tito was installed in full command of his country sooner than any other Communist in Eastern Europe and achieved his goals without Soviet assistance. Yugoslavia's expulsion from the Cominform came in 1948 over disagreements with Stalin over purely internal Communist matters. Stalin wanted to infiltrate Tito's party and subordinate it and its policies to direct dictation from Moscow. In 1955, Khrushchev and Bulganin traveled to Belgrade to try to heal the breach, blaming it on the discredited Stalinist policies. But a lasting reconciliation could not be effected.

Tito's present policy is one of studied neutrality. He advocates peace and opposes military blocs, and has entertained and visited with like-minded leaders of Arab and Asian nations, such as Nehru, Nasser, and other lesser potentates. His attitude toward the West can best be described as one of aloof appreciation of services rendered. There is no doubt that he owes his survival after the break with Russia to adequate and timely Western assistance. The United States alone provided him with a total of about \$1.5 billion in aid, half economic and half military, while the Soviet Union has proposed postponing for five years promised economic credits valued at \$285 million. But in return for vital support from the West Tito has not made any formal commitments for diplomatic, economic, or military cooperation with the West. In the

Yugoslavia (Republic)

Državna Narodna Republika
Jugoslavija)

98,606 square miles.

Population (est. 1959): 18,421,000 (1953: 17,400,000). 41.7%; Croat, 23.5%; Slovene, 13.3%; Macedonian, 5.3%; Albanian, 4.4%; others, 16.3%.

Density per square mile: 186.6.

President: Josip Broz (Tito).

Capital cities (census 1953): Belgrade (1,470,172 (capital)); Zagreb, 350,000 (commercial center); Ljubljana, 136,283 (Slovenian industrial center); Skopje, 122,143 (capital, Macedonian); Titograd, 115,402 (wheat).

Official unit: Dinar.

Languages: Serbo-Croat, Slovene, Macedonian (all official).

United Nations he has voted with or against the Soviet bloc as warranted by the occasion.

HISTORY AND GOVERNMENT. Yugoslavia, fronting on the Adriatic Sea opposite Italy, was formed in 1919 out of some of Europe's oldest trouble spots in the Balkans. After a brief and unstable history of twenty-five years, it emerged from World War II as a Russian satellite.

The 1919 components of Yugoslavia were the old kingdoms of Serbia and Montenegro, and the following: Bosnia-Herzegovina, formerly administered jointly by Austria and Hungary; Croatia-Slavonia, which had had limited autonomy under Hungary; and Slovenia and Dalmatia, formerly administered by Austria.

Alexander I, son of King Peter of Serbia, became the first king of the new country on Aug. 16, 1921. His reign was a rocky one because the Croats, under Dr. Stephen Radić, unceasingly sought autonomy. Finally, a Croat assassinated Alexander in Marseilles, France, in 1934, and since his son Peter was a minor, a regency was set up under Prince Paul, the new King's uncle.

After pursuing an increasingly pro-Axis policy under the regent, Yugoslavia signed the Axis Pact on March 25, 1941; this caused the overthrow of the government two days later. On April 6 the country was invaded by the Nazis and was speedily occupied. While the King and government fled to the Near East and later to London, Yugoslavia was divided into German, Italian, Hungarian, and Bulgarian occupation zones.

Inside Yugoslavia, the Axis occupation was fought by two guerrilla armies—the Chetniks under Draža Mihailović, who supported the monarchy; and the Partisans under Marshal Tito (Josip Broz), who leaned toward Russia. These two groups fought not only the Germans, but also each other. In November, 1943, Tito established an Executive National Committee of Liberation to act as a provisional government, thus repudiating King Peter.

In the elections of Nov. 11, 1945, Tito's forces won overwhelmingly, partly because the monarchist factions boycotted the balloting. Convening on Nov. 29, the new Assembly abolished the monarchy and set up the Federal People's Republic of Yugoslavia. Tito was Prime Minister, and his government won recognition from Britain and the United States.

The Tito government embarked upon an internal policy of ruthless oppression and elimination of opposition factions, includ-

ing the summary trial and execution of Mihailović in 1946.

Soviet support enabled the nation to secure most of Italian Istria under the 1947 peace treaty, but efforts to secure sovereignty over the key port of Trieste were unsuccessful. Zone B of the former free territory of Trieste was, however, transferred to Yugoslavia in Oct., 1954.

Tito was elected President under the new Constitution on Jan. 14, 1953.

Yugoslavia is a federal republic composed of six units—Serbia (which includes the autonomous province of Vojvodina), the autonomous region of Kosovo-tohija, Croatia, Slovenia, Bosnia-Herzegovina, Macedonia, and Montenegro. Actual administration is carried on by State Secretaries responsible to an Executive Council. Actual control of the courts remains with the Yugoslav Communist Party.

ECONOMIC CONDITIONS. Agriculture occupies about 80 per cent of the population. The principal crops are corn, wheat, sugar beets, hemp, hops, opium (in Macedonia) and tobacco (chiefly in Macedonia and Herzegovina). Excellent wines are produced in Dalmatia and Herzegovina along the Danube.

In 1958 there were 4,863,000 cattle, 633,000 sheep, and 4,243,000 hogs.

Manufactures are limited for the most part to consumers' goods. Legislation passed Dec. 5, 1946, nationalized all private economic enterprises, public works and industries in forty-two branches of the national economy, including mining, metallurgy, and all industries which produce natural products.

Leading customers in 1958 were West Germany (9%), Italy (12%), and the U.S.S.R. (8%); leading suppliers, United States and Canada (19%), U.S.S.R. (8%), West Germany (11%), and other EPU countries (15%). Chief exports in 1958 were copper, sawn timber, and livestock.

NATURAL FEATURES AND RESOURCES. About half of Yugoslavia is mountainous. In the north, the Dinaric Alps rise abruptly from the sea and progress eastward as a barren limestone plateau called the Karst. Montenegro is a jumbled mass of mountains, containing also some grassy slopes and fertile river valleys. Southern Serbia, too, is mountainous. A rich plain in the north and northeast, drained by the Danube, is the most fertile area of the country. The Danube and tributaries—the Drava, Sava, and Tisza—in the northeast are the principal rivers.

Yugoslavia is the Balkans' principal mineral producer.

THE UNITED STATES



STATES, TERRITORIES AND CITIES

NOTE: FOR 1960 CENSUS AND GOVERNORS ELECT, SEE TABLE OF CONTENTS.

flower, bird, etc. are official unless otherwise indicated; dates in parentheses are those of adoption. Area is total of land and inland water. Largest cities include incorporated places only.)

ALABAMA

Montgomery.
Governor: John Patterson, Dem. (to Jan. 1963).

Governor: Albert B. Boutwell (to Jan. 1963).

State: Bettye Frink (to Jan. 1963).
Governor: John Graves (indeterminate).
General: McDonald Gallion (to Jan. 1963).

Admitted as territory: Mar. 3, 1817.
Union & (rank): Dec. 14, 1819 (22).
From Union: Jan. 11, 1861.
Admitted Union: July 13, 1868.
Constitution adopted: 1901.

Audemus jura nostra defendere (We defend our rights).

Flower: Camellia (1959).

Bird: Yellowhammer (1927).

State flag: "Alabama" (1931).

State tree: Southern pine (longleaf) (1949).

State motto: Yellowhammer State.

State name: May come from Choctaw word meaning "thicket-clearers" or "vegetar-

thierers."

Population & (rank): 2,832,961 (17).

Population & (rank): 3,061,743 (17).

Estimated population: 3,193,000.

Area (rank): 51,609 sq. mi. (29).

State center: In Chilton Co., 12 mi. SW of Monticello.

Number of counties: 67.

Largest cities (1950 Census): Birmingham (247,000); Mobile (129,009); Montgomery (105,000); Gadsden (55,725); Tuscaloosa (50,000).

State forests: 6 (14,248.58 ac.).

State parks: 39 (39,452.9 ac.).

State tax receipts (1956-57): \$618,203,837.

State tax disbursements (1956-57): \$624,-

Alabama is the leading heavy-industry state in the South. Textiles, iron and steel, mill products lead its manufacturing, centers around the "Pittsburgh of the South"—Birmingham. Industry is growing in other areas, including the Tennessee Valley, with its great Muscle Shoals power plant. Lumber, marble, oil, and petroleum are other important industries. Alabama ranks high in the production of cotton, cattle, corn, hay, nuts, chickens and sweet potatoes.

The Tuskegee Institute, founded by Booker T. Washington, Dr. George Washington Carver led out his famed agricultural research.

The Confederate States of America was founded at Montgomery in Feb. 1861, and for a time the Confederate capital.

In 1540, Hernando de Soto and his treasure seekers were the first white men to see the state, although Cabeza de Vaca may have preceded him in 1528.

ALASKA

Capital: Juneau.

Governor: William A. Egan, Dem. (to Jan. 1963).

Secy. of State: Hugh Wade (to Dec. 1962).

Director, Div. of Finance: William S. Brown (apptd. by Gov.).

Atty. General: John L. Rader (to Dec. 1962).

Organized as territory: 1912.

Entered Union & (rank): Jan. 3, 1959 (49).

Constitution ratified: April 24, 1956.

Motto: None.

State flower: Forget-me-not.

State bird: Willow ptarmigan.

State song: "Alaska's Flag."

Nickname: Commonly called "The Last Frontier."

Origin of name: Corruption of native word meaning "great country."

1939 population: 72,524.

1950 population: 128,643.

1939-50 population change: +77.4%

1958 estimated population: 191,000.

Area & (rank): 586,400 sq. mi. (1).

Geographic center: 95 mi. south of Ft. Gibbon.

Number of counties: State to have boroughs; number not decided by first legislature.

Largest cities (estimated 1958): Anchorage (35,000); Fairbanks (12,500); Ketchikan (8,000); Juneau (7,500).

State forests: None.

State parks: None.

General revenue (1958-59): \$24,995,519.

General expenditure (1958-59): \$22,869,472.

Alaska, newest and largest of the states, was called "Seward's Folly" in 1867, when that Secretary of State arranged for its purchase from Russia for \$7,200,000. Since then Alaska has returned approximately \$3,500,000,000 worth of products to the U. S.

Canned salmon is Alaska's principal product. It mines gold, supplies all domestically mined U. S. tin and also turns out platinum, coal, antimony, silver, mercury, tungsten and chromium.

The Pribilof Islands, in the Bering Sea, are famous as the breeding ground of the Alaska fur seal, which is under careful government control. Beaver, muskrat, otter, mink and other furs also abound. Alaska's first pulp mill at Ketchikan, constructed at a cost of \$54 million, began operation in 1954. Its second, constructed at Sitka at a cost of \$60,000,000, began operation in Nov. 1959.

Mt. McKinley, in the south central part, is 20,300 feet high, the tallest peak in North

America. With its wild interior, still partly unexplored, the state is a hunter's paradise. With one person for every four and a half square miles in 1950, Alaska is by far the most thinly settled of the states. Sitka was its capital until 1912.

Alaska has magnificent glaciers and active volcanoes. Winter temperatures in the interior have been known to register 78° below zero. However, summer temperatures in the same area have been recorded at 99° above zero; and large parts of the state, especially in the southeast, enjoy mild climate in both summer and winter.

The Aleutians include the following island groups (and major islands): Fox Islands (Unimak, Akutan, Unalaska, Umnak); Islands of the Four Mountains (Chuginadak, Kagamil, Carlisle, Herbert); Andreanof Islands (Atka, Tanaga, Adak, Kanaga); Rat Islands (Kiska, Amchitka, Semisopochnoi, Rat); Near Islands (Agattu, Attu, Shemya). In June 1942, the Japanese occupied Attu and Kiska. However, Attu was retaken by the U. S. in May 1943; Kiska was evacuated by the Japanese in Aug. 1943 after extensive shelling and bombing of the island.

Vitus Bering, a Dane working for the Russians, and Alexei Chirikov discovered Alaska and the Aleutians in 1741.

ARIZONA

Capital: Phoenix.

Governor: Paul Fannin, Rep. (to Jan. 1961).

Secy. of State: Wesley Bolin (to Jan. 1961).

State Auditor: Jewell W. Jordan (to Jan. 1961).

Atty. General: Wade Church (to Jan. 1961).

State Treasurer: H. Y. Sprague (to Jan. 1961).

Organized as territory: Feb. 24, 1863.

Entered Union & (rank): Feb. 14, 1912 (48).

Present constitution adopted: 1911.

Motto: *Ditat Deus* (God enriches).

State flower: Flower of saguaro cactus (1931).

State bird: Cactus wren (1931).

State colors: Blue and old gold (1915).

State song: "Arizona," a march song (1919).

State tree: Palo Verde (1957).

Nickname: Grand Canyon State.

Origin of name: From the Indian "Arizonac," meaning "little spring."

1940 population & (rank): 499,261 (43).

1950 population & (rank): 749,587 (37).

1960 estimated population: 1,284,759.

Area & (rank): 113,909 sq. mi. (6).

Geographic center: In Yavapai Co., 55 mi. SE of Prescott.

Number of counties: 14.

Largest cities (1960 Est.): Phoenix (434,277); Tucson (210,016); Mesa (33,547); Douglas (11,897); Yuma (23,821).

State forests: None.

State parks: 1 dedicated; 2 selected but not dedicated.

State revenue (1959-60): \$196,515,689.

State expenditure (1959-60): \$184,583,875.

Manufacturing now ranks first among Arizona's revenue-producing industries. Next in rank is the mining of copper, gold, vanadium, uranium and silver, the production of copper exceeding that of any other state.

Agriculture is the third-largest revenue-producing industry. By means of irrigation,

its once arid acres produce alfalfa, corn, wheat, sorghum, vegetables, citrus fruits and dates. Income from livestock ranks high in both range and feeder cattle.

Phoenix is a popular health and winter resort and a shipper of cotton and vegetables. Tucson is a winter resort. Douglas loads cattle and smelts copper, and Yuma is an agricultural center.

With the Hopi, Navajo (the large numbers) and Apache tribes, Arizona has the largest U. S. Indian population, with over fourteen reservations. It also has some of the country's most famous scenery: the north is the Grand Canyon; in the south are the Petrified Forest and Painted Desert.

Marcos de Niza, a Franciscan friar, entered the area in 1539 in search of the mythical Seven Cities of Cibola, and was followed a year later by Coronado.

ARKANSAS

Capital: Little Rock.

Governor: Orval Faubus, Dem. (to Jan. 1961).

Lieut. Governor: Nathan Gordon (to Jan. 1961).

Secy. of State: C. G. Hall (to Jan. 1963).

Controller: L. A. Mashburn (to Jan. 1963).

Atty. General: Bruce Bennett (to Jan. 1961).

Organized as territory: Mar. 2, 1819.

Entered Union & (rank): June 15, 1836 (25).

Succeeded from Union: May 6, 1861.

Re-entered Union: June 22, 1868.

Present constitution adopted: 1874.

Motto: *Regnat populus* (The people rule).

State flower: Apple Blossom (1901).

State tree: Pine (1939).

State bird: Mockingbird (1929).

State song: "The Arkansas Traveler" (1949).

Nickname: Land of Opportunity.

Origin of name: From the Quapaw Indians.

1940 population & (rank): 1,949,387 (24).

1950 population & (rank): 1,909,511 (30).

1959 estimated population: 1,789,999.

Area & (rank): 53,102 sq. mi. (27).

Geographic center: In Pulaski Co., 12 mi. W of Little Rock.

Number of counties: 75.

Largest cities (1950 Census): Little Rock (213); Fort Smith (47,942); North Little Rock (44,097); Pine Bluff (37,162);

Springs (29,307).

State forests: 1 (19,434 ac.).

State parks: 16 (19,113 ac.).

State tax receipts (1958-59): \$152,754,747.

Taxes from all sources (1958-59): \$242,347,454.

State general expenditure (1958-59): \$244,578.

* Includes federal and non-revenue taxes.

Arkansas produces 96% of the nation's high-grade domestic bauxite ore—the source of aluminum. It also has the only diamond mine in the Western Hemisphere. Located near Murfreesboro in Pike county, the mine is used as a tourist attraction on a "find your own keepers" basis.

The state is almost equally divided between mountains and delta areas and has more year-round fishable lakes and streams than any other state. There are two national forests in the Ouachita and Ozark mountain ranges. Hot Springs, the nation's

ional reservation, entertains fifteen population in guests each year. Its en curative springs, which are un-supervision of the Federal Govern-ow water at 147°F. the year round. as is a leader in the production of nd soybeans, and also produces large s of rice, corn, wheat and other ruit, vegetables, broilers, turkeys and . Lumber provides 51% of the state's l employment, and several of the s largest wood and wood products g plants are located in Arkansas. est archery manufacturing plant in on is in Pine Bluff. The state also gh in the production of oil and gas.

CALIFORNIA

Sacramento.

Edmund G. Brown, Dem. (to Jan.

vernor: Glenn M. Anderson (to Jan.

ate: Frank M. Jordan (to Jan. 1963).

: Alan Cranston (to Jan. 1963).

eral: Stanley Mosk (to Jan. 1963).

Union & (rank): Sept. 9, 1850 (31).

stitution adopted: 1879.

ureka (I have found it).

er: Golden poppy (1903).

: California redwoods (*Sequoia sem-*
s & *Sequoia gigantea*) (1937 & 1953).

: California valley quail (1931).

nal: California grizzly bear (1953).

: California golden trout (1947).

ct: California dog-face butterfly
ial).

rs: Blue and gold (1951).

: "I Love You, California" (1951).

: Golden State.

name: From a book, *Amadís de*
by García Ordóñez de Montalvo, c.

ation & (rank): 6,907,387 (5).

ation & (rank): 10,586,223 (2).

ated population: 15,530,973 (prelimi-
nsus figures).

rank): 158,693 sq. mi. (3).

e center: In Madera Co., 35 mi. NE
era.

counties: 58.

ities (1950 Census): Los Angeles

(8); San Francisco (775,357); Oak-
(84,575); San Diego (334,387); Long
(250,767).

ts: 8 (70,235 ac.).

s and beaches: 160 (700,000 ac.).

eral revenue (1960-61 estimated): \$1.-
324.

eral expenditure (1960-61 estimated):
99,526.

ia earns more money from raising
catching fish than any other state,
nds high in oil production, lumber-
manufacturing. It has more motor
than any other state or any
untry. Out-of-state tourist visitors
travel and recreation expenditures
ate's residents continue to play an
t part in the expansion of trade and
nt opportunities. Irrigation makes

possible the production of more than 200
commercial crops.

Nature is spectacular. Death Valley, in the
southeast, is 282 feet below sea level, the
lowest spot in the nation; Lassen Peak is
the only active U. S. volcano outside of
Alaska and Hawaii, although its last eru-
ptions were recorded in the years from 1914
to 1917; the General Sherman Tree in Se-
quoia National Park is estimated to be about
3,500 years old; and a stand of bristlecone
pine trees in the White Mountains is esti-
mated to be over 4,000 years old. San Pedro
is the world's largest man-made harbor, and
the Bank of America National Trust and
Savings Association, founded by the Gian-
nini family, is the largest privately owned
bank in the world.

Gold, which was responsible for the state's
settlement boom, is still found here, but the
state's most important mineral products to-
day are oil, natural gas and its liquids, ce-
ment, miscellaneous stones, borates, and
mercury.

California is a leader in electrical energy,
and its cities specialize in aircraft and parts,
missiles, food processing, electrical and elec-
tronic equipment, machinery and fabricated
metal products.

The San Francisco-Oakland and Golden
Gate bridges are among the world's en-
gineering marvels.

Juan Rodríguez Cabrillo, Portuguese navi-
gator, was probably the first white man to
see the state in 1542.

COLORADO

Capital: Denver.

Governor: Stephen L. R. McNichols, Dem. (to
Jan. 1963).

Lieut. Governor: Robert L. Knous (to Jan.
1963).

Secy. of State: George J. Baker (to Jan. 1963).

Controller: E. G. Spurlin (indefinite).

Atty. General: Duke W. Dunbar (to Jan. 1963).

Organized as territory: Feb. 28, 1861.

Entered Union & (rank): Aug. 1, 1876 (38).

Present constitution adopted: 1876.

Motto: *Nil sine Numine* (Nothing without
Providence).

State flower: Rocky Mountain columbine
(1899).

State tree: Colorado blue spruce (1939).

State bird: Lark bunting (1931).

State colors: Blue and white (1911).

State song: "Where the Columbines Grow"
(1915).

Nickname: Centennial State.

Origin of name: From the Spanish, meaning
"red."

1940 population & (rank): 1,123,296 (33).

1950 population & (rank): 1,325,089 (34).

1960 estimated population: 1,742,029.

Area & (rank): 104,247 sq. mi. (8).

Geographic center: In Park Co., 30 mi. NW of
Pikes Peak.

Number of counties: 63.

Largest cities (1960 Est.): Denver (491,409);

Pueblo (90,440); Colorado Springs (69,181);

Aurora (48,335); Boulder (37,517).

State forests: 1 (70,980 ac.).

Total state revenue (1958): \$365,920,645.

Total state expenditure (1958): \$365,080,733.

Colorado has the highest mean elevation of any state, with 54 of its peaks over 14,000 feet in height and more than 1,000 going beyond the 10,000-foot mark. It began as a miner of gold but has been predominantly agricultural in recent times. Livestock, wheat, hay, beans, sugar beets, corn, potatoes, barley, and truck vegetables head the crop list. Like California and Arkansas, the state has a highly developed irrigation system to counteract its dry climate and promote farming.

Colorado is one of the nation's largest producers of uranium and vanadium; also mined are gold, silver, lead, zinc, copper, molybdenum, coal and several nonmetallics. The state is also a leading oil producer.

Pueblo, the "Pittsburgh of the West," makes iron, steel, brick, tile and foundry products. Colorado Springs is perhaps the most popular tourist center in the Rocky Mountain sector. Mount Evans Highway is the highest auto road in North America. The world's highest suspension bridge stretches 1,053 feet over the Royal Gorge of the Arkansas River. Summit Lake, 12,740 feet high, near the top of Mt. Evans, is the highest lake in the U. S. reached by an auto road.

Of archeological interest are the cliff dwellings located in the southwestern part of the state.

Coronado entered the state in 1540.

CONNECTICUT

Capital: Hartford.

Governor: Abraham A. Ribicoff, Dem. (to Jan. 1963).

Lieut. Governor: John N. Dempsey (to Jan. 1963).

Secy. of State: Ella T. Grasso (to Jan. 1963).

Comptroller: Raymond S. Thatcher (to Jan. 1963).

Atty. General: Albert L. Coles (to Jan. 1963).

Entered Union & (rank): Jan. 9, 1788 (5).

Present constitution adopted: 1818; revised effective 1955.

Motto: *Qui transtulit sustinet* (He who transplanted still sustains).

State flower: Mountain laurel (1907).

State tree: White oak (1947).

State bird: American robin (1943).

State song: None.

Nickname: Constitution State.

Origin of name: From an Indian word (Quinnehtukqut) meaning "beside the long tidal river."

1940 population & (rank): 1,709,242 (31).

1950 population & (rank): 2,007,280 (28).

1960 estimated population: 2,513,628.

Area & (rank): 5,009 sq. mi. (48).

Geographic center: In Hartford Co., at East Berlin.

Number of counties: 8.

Largest cities (1950 Census): Hartford (162,785); New Haven (148,923); Bridgeport (156,162); Waterbury (106,803); Stamford (89,956).

State forests: 26 (122,986 ac.).

State parks: 72 (21,207 ac.).

State general revenue (1959): \$364,446,328.

State general expenditure (1959): \$490,930,511.

Connecticut earned its sobriquet, "Arsenal of the Nation," by its ability to turn out firearms and ammunition in large quantities, and from this developed an ability to turn out precision instruments of all classes.

Connecticut's cities produce a variety of products, some of which are: arms, sea machines, airplanes, typewriters, machinery, hardware, cutlery, tools, clocks, locks, machinery, brass products and hardware. Hartford, which has the oldest U. S. newspaper still being published—the *Connecticut*—established 1764—is the insurance center of the nation.

Connecticut devotes its farmland mainly to dairying, fruit growing and poultry raising. It stands high in tobacco growing; no crop in the nation receives as high a price per acre as her shade-grown tobacco.

The state is a popular resort area for its beaches on Long Island Sound and for its inland lakes and forested hills. The southwest part of the state is a suburban area of New York City.

Connecticut was the first state to have a written constitution, the *Fundamental Orders*, adopted by three original towns of colonial days in Jan. 1639.

DELAWARE

Capital: Dover.

Governor: J. Caleb Boggs, Rep. (to Jan. 1963).

Lieut. Governor: David P. Buckson (to Jan. 1961).

Secy. of State: George J. Schulz (to Jan. 1961).

State Treasurer: Belle Everett (to Jan. 1961).

Atty. General: J. D. Bove, Jr. (to Jan. 1961).

Entered Union & (rank): Dec. 7, 1787 (1).

Present constitution adopted: 1897.

Motto: Liberty and independence.

State colors: Colonial blue and buff.

State flower: Peach blossom.

State tree: American holly.

State bird: Blue hen chicken.

State song: "Our Delaware."

Nicknames: Diamond State; First State.

Origin of name: In honor of Sir Thomas Lord De La Warr.

1940 population & (rank): 266,505 (46).

1950 population & (rank): 318,085 (46).

1960 estimated population: 442,891.

Area & (rank): 2,399.2 sq. mi. (49).

Geographic center: In Kent Co., 11 mi. S. of Dover.

Number of counties: 3.

Largest cities (1960 Est.): Wilmington (234); Newark (11,329); Dover (7,232);

Wilmington (5,779); Elsmere (7,287).

State forests: 6 (4,945 ac.).

State parks: 3.

State general revenue (fiscal 1960): \$72,760,000.

State general expenditure (fiscal 1960): \$133,410,000.

Little Delaware, at the lowest mean elevation of any state, grows a great variety of small fruit and vegetables and is a pioneer in the industry of food crops. Peaches, strawberries, corn, wheat, beans, asparagus, tomatoes and soybeans are the leading crops. Fishing in the bays

rtant industry. Delaware's chicken
re one of the great supply sources
big markets of the East.

actures in Delaware include chem-
ulcanized fiber, glazed kid and
leathers, textiles, paper, dental sup-
petal products, machinery, machine
d transportation equipment of every
ype. In 1844, the *Bangor*, the first
agoing propellor-type vessel con-
in the U. S., was launched at Wil-

re was the first state to ratify the
nstitution, on Dec. 7, 1787. During
War, although a slave state, Dela-
used to secede from the Union; the
part of the state, however, sup-
any supporters to the Confederacy.
Hudson discovered Delaware Bay in
ration of 1609. First settlers in the
re Dutchmen, who arrived in 1631,
were shortly afterwards massacred
ndians.

DISTRICT OF COLUMBIA

(City of Washington)

d to Congress: 1788 by Maryland; 1789
ginia (retroceded to Virginia Sept.

overnment transferred to D. C.: Dec. 1,

municipal corporation: Feb. 21, 1871.

rm of government established: June 11,

of Board of Commissioners: Robert E.
ghlin.

of Board of Commissioners: Mark
a, Jr. (to Sept. 2, 1960) and Col.
ck J. Clark (to Aug. 1, 1964).

stitia omnibus (Justice to all).

ower: American beauty rose.

name: In honor of Columbus.

ation & (rank as city): 663,091 (11).

ation & (rank as city): 802,178 (9).

ated population: 746,958.

ad, 60.41 sq. mi.: inland water, 7.84.

center: Near corner of Fourth and
NW.

Highest, 420 ft.; lowest, sea level.

Between Virginia and Maryland, on
c River.

Protestant, 451; Roman Catholic,

sh, 16; others, 10.

: 780 (6,945.5 ac.).

(May 31, 1959): 608,912.

582,793.

sets: 402,046.

ions: AM, 7; FM, 9.

stations: 4.

valuation (June 1959): \$275,621,105.

ate (1959): \$2.30 per \$100.

st: None.

1959): \$202,462,321.

es (1959): \$227,975,584.

istrict of Columbia—identical with
of Washington—is the capital of
and the first carefully planned
the world.

story began in 1790 when Congress
selection of a new capital site, 10
are, along the Potomac. When the

site was determined, it included thirty and
three-quarters square miles on the Virginia
side of the river. In 1846, however, Congress
returned that area to Virginia.

The city was planned and partly laid out
by Major Pierre Charles L'Enfant, a French
engineer. This work was perfected and com-
pleted by Major Andrew Ellicott. In 1814,
during the war of 1812, a British force fired
the capital, and it was from the white paint
applied to cover fire damage that the Presi-
dent's home came to be called the White
House.

Washington's skyline is dominated by the
Capitol and the Washington Monument,
towering 555 feet. The Capitol, while not in
the city center, is the key to the street ad-
dress system. The city is laid out in rec-
tangular blocks, created by streets intersect-
ing at right angles. In addition, diagonal
arteries fan out from various centers. Penn-
sylvania Avenue—the radial lines are gen-
erally named for the states—is the most
famous of them, with the White House at
number 1600.

The Capitol is 751 feet long and 350 feet
wide. It has 431 rooms. The two wings, con-
structed of marble, house the Senate and
the House; and the central part of the build-
ing contains the Rotunda, the Statuary Hall
and the old Supreme Court chamber. Visitors
may go through the building from 9 A.M.
until 4:30 P.M. Congress normally convenes
at noon, and the floor of the Senate and
House must be cleared by 11:45 A.M. The
galleries in the Senate and House chambers
are open to visitors during sessions.

Washington has many other famous build-
ings and monuments—the Library of Con-
gress, Jefferson Memorial, Lincoln Memorial,
Grant Memorial, Tomb of the Unknown Sol-
dier (Arlington Cemetery), Treasury Build-
ing, the Pentagon, Petersen House (where
Lincoln died) and scores of others.

Washington is administered by three com-
missioners appointed by the President of the
U. S. Two must have been civilian residents
of the District for at least three years be-
fore their appointment. They are confirmed
by the Senate and serve terms of three years
each. The other commissioner is detailed
from time to time from the Corps of En-
gineers of the U. S. Army. He must be a
captain or of higher grade and must have
served at least fifteen years in the Corps.

FLORIDA

Capital: Tallahassee.

Governor: LeRoy Collins, Dem. (to Jan. 1961).

Secy. of State: Robert A. Gray (to Jan. 1961).

Comptroller: Ray E. Green (to Jan. 1961).

Atty. General: Richard W. Ervin (to Jan.
1961).

Organized as territory: Mar. 30, 1822.

Entered Union & (rank): Mar. 3, 1845 (27).

Seceded from Union: Jan. 10, 1861.

Re-entered Union: June 25, 1868.

Present constitution adopted: 1885.

Motto: In God we trust.

State flower: Orange blossom (1909).

State bird: Mockingbird (1927).

State song: "Suwannee River" (1935).

Nickname: Sunshine State.

Origin of name: From the Spanish, meaning "feast of flowers" (Easter).

1940 population & (rank): 1,897,414 (27).

1950 population & (rank): 2,771,305 (20).

1959 estimated population: 4,900,000.

Area & (rank): 58,666 sq. mi. (22).

Geographic center: In Citrus Co., 12 mi. W of N of Brooksville.

Number of counties: 67.

Largest cities (1960 Est.): Miami (282,600);

Tampa (274,407); Jacksonville (197,948);

St. Petersburg (178,088); Orlando (86,880).

State forests: 4 (204,035 ac.).

State parks: 23 (74,936 ac.).

State government receipts (1959-60): \$995,439,-161.

State government expenditures (1959-60): \$928,-844,257.

* Includes Federal and Interfund transfers.

Industry and agriculture are Florida's biggest pursuits, but hotel statistics point to its chief fame—resorts and tourists. Along its coastline, dozens of communities more than double in population during the winter season when northerners flee snow and cold.

Oranges and grapefruit lead Florida's crop list, then come tomatoes, tobacco, beans, celery, potatoes and field corn. Truck gardening, commercial fishing and cattle are leading industries. Deep-sea fishing for sport is a leading tourist hobby. Industry is becoming increasingly important, with metal-working and chemicals now added to lumber, paper and citrus processing. Tampa is one of the largest cigar manufacturers and Jacksonville ships lumber and turpentine.

Florida's low elevation is dotted by some 30,000 small lakes and the Everglades National Park in the south. St. Augustine, founded in 1565, is the oldest town of European origin in the U. S. Key West, exclusive resort city, is connected to the mainland by a unique causeway.

In 1513, Ponce de León, seeking the mythical "Fountain of Youth," was the first white man to see the state.

GEORGIA

Capital: Atlanta.

Governor: Ernest Vandiver, Dem. (to Jan. 1963).

Lieut. Governor: Garland Byrd (to Jan. 1963).

Secy. of State: Ben Fortson (to Jan. 1963).

Comptroller General: Zach Cravey (to Jan. 1963).

Atty. General: Eugene Cook (to Jan. 1963).

Entered Union & (rank): Jan. 2, 1788 (4).

Succeeded from Union: Jan. 19, 1861.

Re-entered Union: July 15, 1870.

Present constitution adopted: 1945.

Motto: Wisdom, justice and moderation.

State flower: Cherokee rose (1916).

State tree: Live oak (1937).

State bird: Brown thrasher (1935).

State song: "Georgia" (1922).

Nicknames: Peach State; Empire State of the South.

Origin of name: In honor of George II of England.

1940 population & (rank): 3,123,723 (14).

1950 population & (rank): 3,444,578 (13).

1960 estimated population: 3,984,000.

Area & (rank): 58,876 sq. mi. (21).

Geographic center: In Twiggs Co., 18 mi. of Macon.

Number of counties: 159.

Largest cities (1960 Est.): Atlanta (1,014,000).

Columbus (216,155); Augusta (214,000).

Savannah (186,161); Macon (178,952).

State forests: 24,056,600 ac. (63.8% of state area).

State parks: 44 (60,794 ac.) (37 in operation).

State general revenue (1959): \$516,543,139.

State general allocations (1959): \$518,579,000.

Georgia is typical of the changing South. The value of its factory products has passed the value of its farm products, and industrialization is ever increasing. Agriculture is achieving importance as an industry center. Cotton and lumber products, poultry, fertilizer, processed food and a great variety of other items are among the factory outputs of Macon, Augusta, Savannah and Columbus.

Georgia ranks high in cotton, peanuts and pecans. Georgia's peaches are nationally famous. From its vast stands of pine come more than half of the world's turpentine, and 79% of the U. S. supply. The state is one of the leaders in the production of its clay products. Cattle grazing is extensive. Georgia marble is widely used.

Warm Springs has the celebrated foundation operated to aid infantile paralysis victims. It was there that President Franklin D. Roosevelt died on April 12, 1945.

Hernando de Soto, a Spaniard, in 1532 looked over the red clay of Georgia. General James Oglethorpe founded the British colony February 12, 1733, at Savannah.

HAWAII

Capital: Honolulu (on Oahu).

Governor: William F. Quinn, Rep. (to Jan. 1962).

Lieut. Governor: James K. Kealoha (to Jan. 1962).

Comptroller: Michael M. Miyake (to Dec. 1961).

Atty. General: Shiro Kashiwa (to Dec. 1961).

Organized as territory: 1900.

Entered Union & (rank): Aug. 21, 1959 (50).

Motto: *Ua Mau Ke Ea O Ka Aina I Kaula*.

(The life of the land is perpetual righteousness).

State flower: Hibiscus.

State song: "Hawaii Pono!" (unofficial).

State bird: Nene (Hawaiian goose).

Nickname: Aloha State.

Origin of name: Uncertain. The islands have been named by Hawaii Loa, traditional discoverer. Or they may have been named after Hawaii or Hawaiian traditional home of the Polynesians.

1940 population: 423,330.

1950 population: 499,794.

1940-50 population change: +18.1%.

1960 estimated civilian population: 609,086.

Area & (rank): 6,423 sq. mi. (47).

Counties: 4.

Largest cities (1950 Census): Honolulu (83,000).

Hilo (27,198); Wahiawa (6,000).

Kailua-Lanikai (7,740); Wailuku (7,400).

State parks: 13.

State revenue (fiscal 1959): \$199,487,780.

State expenditure (fiscal 1959): \$164,046,370.

1, 2,100 miles west-southwest of San O, is a 390-mile chain of islets and islands—Hawaii, Kahoolawe, Maui, Molokai, Oahu, Kauai, and Niihau. Ocean) Island, an uninhabited islet Leeward Islands, is administratively Hawaii.

's temperature is mild and the soil e for tropical fruits and vegetables. gar and pineapple are its chief prod- approximately 59% of the world's pineapple being produced in the Hawaii also grows coffee, rice, nuts and potatoes. Some live- and poultry are raised. The tourist is Hawaii's fourth largest source ne.

's highest peak, Mauna Kea, rises feet and is, in a sense, the world's mountain since it springs from an floor 13,000 feet below sea level.

was discovered in 1778 by Captain Cook, who named it the Sandwich It was ruled by native monarchs un- thereafter as a republic until 1898, ceded itself to the U. S.

IDAHO

Boise.

Robert E. Smylie, Rep. (to Jan.

vernor: W. E. Drevlow (to Jan. 1963).

State: Arnold Williams (to Jan. 1963).

ltor: Joe R. Williams (to Jan. 1963).

eral: Frank L. Benson (to Jan. 1963).

as territory: Mar. 3, 1863.

Union & (rank): July 3, 1890 (43).

Constitution adopted: 1890.

to *perpetua* (May you last forever).

er: *Syringa* (1931).

: White pine (1935).

: Mountain bluebird (1931).

: "Here We Have Idaho."

: Gem State; Gem of the moun-

name: From a Shoshoni Indian word g "sunup."

ation & (rank): 524,873 (42).

ation & (rank): 588,637 (43).

ated population: 663,000.

rank): 83,557 sq. mi. (13).

ic center: In Custer Co., 24 mi. S by W lis.

' counties: 44, plus small part of Yel- ie Park.

ities (1960 Est.): Boise (34,378);

Falls. (33,005); Pocatello (28,199);

alls (19,899); Nampa (17,929); Coeur

(14,147).

sts: 925,000 ac.

s: 4 (9,000 ac.).

ue (1957-59): general fund, \$64,758,-

pecial funds, \$346,508,296.

nditure (1957-59): general fund, \$64,-

special funds, \$328,191,859.

of Idaho slopes to the west from tral wilderness mountains and the al divide peaks in the east. One he state is covered by forests.

lumbering and irrigation farming a important for years. The state's pressive growth began when World

War II military needs made processing agri- cultural products a big industry. Crops in- clude potatoes, wheat, apples, corn, barley and hops. Light manufacturing is increasing.

Tourist trade is important. Streams and lakes provide fishing, camping and boating sites. The nation's largest elk herds draw hunters from all over the world, and the famed Sun Valley resort attracts thousands of visitors to its swimming and skiing facilities.

ILLINOIS

Capital: Springfield.

Governor: William G. Stratton, Rep. (to Jan. 1961).

Lieut. Governor: John W. Chapman (to Jan. 1961).

Secy. of State: Charles F. Carpentier (to Jan. 1961).

Auditor: Elbert S. Smith (to Jan. 1961).

Atty. General: William L. Guild (to Jan. 1961).

Organized as territory: Feb. 3, 1809.

Entered Union & (rank): Dec. 3, 1818 (21).

Present constitution adopted: 1870.

Motto: State sovereignty, national union.

State flower: Violet (1908).

State tree: Oak (1903).

State bird: Cardinal (1929).

State song: "Illinois" (1925).

State slogan: Land of Lincoln.

Nickname: Prairie State.

Origin of name: From an Indian word and French suffix meaning "tribe of superior men."

1940 population & (rank): 7,897,241 (3).

1950 population & (rank): 8,712,176 (4).

1960 estimated population: 10,008,987.

Area & (rank): 56,400 sq. mi. (24).

Geographic center: In Logan Co., 28 mi. NE of Springfield.

Number of counties: 102.

Largest cities (1960 Est.): Chicago (3,516,- 258); Peoria (102,751); Rockford (125,955);

East St. Louis (81,453); Springfield (83,001).

State forests: 3 (10,278 ac.).

State parks, memorials, conservation areas: 76 (90,000 ac.).

State revenue (1958-59): \$1,024,983,326 (state treasurer report).

State expenditure (1958-59): \$995,517,686 (state dept. of finance).

Illinois anchors the Midwest like a rich giant, versatile in every big wealth-making industry. It stands high in manufacturing, coal mining, farm cash income, oil produc- tion. The sprawling Chicago district (in- cluding a slice of Indiana) is a great iron and steel producer, meat packer, grain ex- change and railroad center. Chicago is also a busy long-flight airport city and Great Lakes port area. The Illinois sand and gravel busi- ness is exceeded only by that of California.

In agriculture, Illinois is first in soy beans and high in corn, oats, wheat, barley, rye, potatoes and truck vegetables. Hog rais- ing and dairying are important industries of the state.

Illinois manufactures almost everything. Railroad cars, clothing, furniture, tractors, liquor, watches and farm implements are some of the items made in several of its

Cities. An important U. S. arsenal is located on a Mississippi island off Rock Island.

Central Illinois is noted for shrines and memorials associated with the life and works of Abraham Lincoln, greatest son of Illinois. In Springfield are the Lincoln Home and Lincoln Tomb. At New Salem State Park, 20 miles northwest of Springfield, the reconstructed village of New Salem stands as a notable Lincoln memorial.

INDIANA

Capital: Indianapolis.

Governor: Harold W. Handley, Rep. (to Jan. 1961).

Lieut. Governor: Crawford F. Parker (to Jan. 1961).

Secy. of State: John R. Walsh (to Dec. 1960).

Treasurer: Jack A. Haymaker (to Feb. 1961).

Atty. General: Edwin K. Steers (to Jan. 1961).

Organized as territory: May 7, 1800.

Entered Union & (rank): Dec. 11, 1816 (19).

Present constitution adopted: 1851.

Motto: The Crossroads of America.

State flower: Peony (1957).

State tree: Tulip tree (1931).

State bird: Cardinal (1933).

State song: "On the Banks of the Wabash, Far Away" (1913).

Nickname: Hoosier State.

Origin of name: Meaning "land of Indians."

1940 population & (rank): 3,427,796 (12).

1950 population & (rank): 3,934,224 (12).

1959 estimated population: 4,638,000.

Area & (rank): 36,291 sq. mi. (38).

Geographic center: In Boone Co., 14 mi. W of N of Indianapolis.

Number of counties: 92.

Largest cities (1950 Census): Indianapolis (427,-

173); Gary (133,911); Ft. Wayne (133,607);

Evansville (128,636); South Bend (115,911).

State forests: 14 (120,000 ac.).

State parks: 20 (43,977.39 ac.) and 14 (703.66 ac.) state memorials.

State general revenue (1958-59): \$560,360,000.

State general expenditure (1958-59): \$549,302,000.

Indiana's fifty-one-mile Michigan water-front is one of the great industrial centers of the world, turning out iron and steel and oil products to make this state a leader in manufacturing. Its cities have some of the world's largest industrial plants and their great output is further swelled by the inland factories. The list of products is endless—automobiles, farm implements, aviation and railroad equipment, sewing machines are made from iron ore mined in the Great Lakes region.

In farming the state stands high in soy beans, corn, tobacco, onions, wheat, oats, rye and tomatoes.

Indianapolis is the second largest U. S. city not on a navigable body of water. Wyandotte Cave, the second largest in the U. S., is located in Crawford County of Southern Indiana. West Baden and French Lick are well known for their mineral springs. Indiana was one of the early states to adopt the secret ballot based on the Australian system.

IOWA

Capital: Des Moines.

Governor: Herschel C. Loveless, Dem. (to 1961).

Lieut. Governor: Edward J. McManus (to 1961).

Secy. of State: Melvin D. Synhorst (to 1961).

Treasurer: M. L. Abrahamson (to Jan. 1961).

Atty. General: Norman A. Erbe (to Jan. 1961).

Organized as territory: June 12, 1838.

Entered Union & (rank): Dec. 28, 1846 (29).

Present constitution adopted: 1857.

Motto: Our liberties we prize and our rights we will maintain.

State flower: Wild rose (1897).

State bird: Eastern goldfinch (1933).

State colors: Red, white and blue (in flag).

State song: "Song of Iowa."

Nickname: Hawkeye State.

Origin of name: Probably from an Indian meaning "I-o-w-a, this is the place."

1940 population & (rank): 2,538,268 (20).

1950 population & (rank): 2,621,073 (22).

1959 estimated population: 2,809,000.

Area & (rank): 56,280 sq. mi. (25).

Geographic center: In Story County, 5 mi. S of Ames.

Number of counties: 99.

Largest cities (1950 Census): Des Moines (1965); Sioux City (83,991); Davenport (54,919); Cedar Rapids (72,296); Waterloo (65,198).

State forests: 7 (13,469 ac.).

State parks: 89 (28,437 ac.).

State general revenue (1958-59): \$153,114,900.

State general expenditure (1958-59): \$152,578.

Iowa stands in a class by itself as an agricultural state, supplying 10% of the nation's food supply. It ranks first in livestock come, value of cattle, sheep and hogs marketed, production averages of oats and corn ranks second in production of chickens, eggs and soybeans. Nearly 95% of the state's acreage is in farms, and the fertility of the soil is unsurpassed. Of all the Grade A corn in the country, 25% is in Iowa.

However, the value of Iowa's manufactured products is more than double that of her agricultural products. The top industrial activity is meat packing. Des Moines follows in the publication of 100 newspapers, 100 magazines, 100 journals and is also a large insurance center.

Iowa has the highest functional literacy rate in the nation.

West Branch is the birthplace of Herbert Hoover, who was the first President of the U. S. to be born west of the Mississippi.

KANSAS

Capital: Topeka.

Governor: George Docking, Dem. (to 1961).

Lieut. Governor: Joseph W. Henkle, Sr. (to 1961).

Secy. of State: Paul R. Shanahan (to 1961).

Treasurer: George Hart (to Jan. 1961).

ral: John Anderson, Jr. (to Jan.

as territory: May 30, 1854.

ion & (rank): Jan. 29, 1861 (34).

stitution adopted: 1859.

Eurymachus per aspera (To the stars
difficulties).

r: Sunflower (1903).

Cottonwood (1937).

Western meadow lark (1937).

nal: Buffalo (1955).

: "Home on the Range" (1947).

h: "The Kansas March" (1935).

: Sunflower State; Jayhawk State.

ame: From a Siouan word meaning
of the south wind."

ation & (rank): 1,801,028 (29).

ation & (rank): 1,905,299 (31).

ated population: 2,115,441.

ank): 82,276 sq. mi. (15).

center: In Barton Co., 15 mi. NE of
end.

counties: 105.

ties (1959 State Census): Wichita

; Kansas City (131,360); Topeka

; Salina (38,109); Hutchinson (36,-

ts: 1 (4,000 ac.).

: 22 (14,394 ac.).

ating revenue (1958-59): \$341,307,705.

ating expenditure (1958-59): \$348,569,-

finds its strength in wheat grow-
milling and a variety of manufac-
terprises. Slaughtering and meat
are also extensively pursued. In
part of the state, where a replica
City's Front Street recalls the old
the city's heyday as a famous cow-
prairie land sprawls over a large
gives an abundance of winter wheat
razing.

orghums, oats, barley, soy beans
oes are other crops. Besides oil,
ines zinc, coal, salt and lead.

te is the geographical center of
ntiguous states, and the geodetic
the North American continent.

a growing industrial center, is a
the production of military and
ircraft. Kansas City is a transpor-
lling, and meat-packing center.

ing dry since the Murray Liquor
881, Kansas repealed prohibition
1949.

f unusual interest in Kansas in-
sident Eisenhower's boyhood home
ew Eisenhower Memorial Museum
(Presidential Library will open in
n Brown's well-preserved cabin at
e; recreated Front Street at Dodge
two historic military reservations—
worth and Ft. Riley.

KENTUCKY

ankfort.

Bert Combs, Dem. (to Dec. 1963).

rnor: Wilson W. Wyatt (to Dec.

te: Henry H. Carter (to Dec. 1963).

Finance: Robert F. Matthews (to

).

Atty. General: John B. Breckinridge (to Dec.
1963).

Entered Union & (rank): June 1, 1792 (15).

Present constitution adopted: 1891.

Motto: United we stand, divided we fall.

State flower: Goldenrod.

State bird: Kentucky cardinal.

State song: "My Old Kentucky Home."

Nickname: Blue Grass State.

Origin of name: From an Iroquoian Indian
word "Ken-tah-ten" meaning "land of
tomorrow."

1940 population & (rank): 2,845,627 (16).

1950 population & (rank): 2,944,806 (19).

1959 estimated population: 3,125,000.

Area & (rank): 40,395 sq. mi. (37).

Geographic center: In Marion Co., 3 mi. W of
N of Lebanon.

Number of counties: 120.

Largest cities (1960 Est.): Louisville (385,-
688); Covington (59,647); Lexington (62,-
409); Owensboro (42,178); Paducah (34,-
065).

State forests: 3 (30,022 ac.).

State parks: 29 (36,198 ac.).

Total state revenue (1958-59): \$340,560,249.

Total state expenditure (1958-59): \$390,183,362.

Kentucky prides itself on producing some
of the nation's best tobacco, horses and
whisky. It stands high in the production of
native asphalt, hemp, coal, corn, oil.

Among the manufactured items produced
by its cities are furniture, aluminum ware,
brooms, shoes, lumber products, machinery,
textiles and iron and steel products. Be-
sides coal and oil, important minerals are
natural gas and quarry products.

Louisville, the largest city, famed for
the Kentucky Derby at Churchill Downs,
has a large municipal university, distills
whisky and is a great cigarette maker. The
Blue Grass country is the home of some of
the world's finest race horses. Lexington,
standing in the center of this country, is a
leading tobaccoist. Mammoth Cave, with its
many miles of underground passages, is one
tourist attraction. Another is Kentucky Lake,
184 miles wide, one of the largest man-made
bodies of water in the world.

Kentucky was credited with a star in the
Confederate flag because a secessionist group
in the southwest part of the state set up
a short-lived government and joined the
Confederacy. The legitimate government,
however, remained in the Union throughout
the Civil War.

Marquette and Joliet in 1673 saw Kentucky
when it was the "Dark and Bloody Ground,"
fiercely contested by Indian tribes. Daniel
Boone explored the country in 1767.

LOUISIANA

Capital: Baton Rouge.

Governor: James H. Davis, Dem. (to May
1964).

Lieut. Governor: C. C. Aycock (to May 1964).

Secy. of State: Wane O. Martin, Jr. (to May
1964).

Comptroller: Roy E. Theriot (to May 1964).

Atty. General: Jack P. Gremillion (to May
1964).

Organized as territory: Mar. 26, 1804.

Entered Union & (rank): Apr. 30, 1812 (18).
 Succeeded from Union: Jan. 26, 1861.
 Re-entered Union: May 26, 1865.
 Present constitution adopted: 1921.
 Motto: Union, justice and confidence.
 State flower: Magnolia (1900).
 State bird: Pelican (unofficial).
 State song: "Song of Louisiana."
 Nicknames: Pelican State; Creole State; Sugar State.
 Origin of name: In honor of Louis XIV of France.
 1940 population & (rank): 2,363,880 (21).
 1950 population & (rank): 2,683,516 (21).
 1960 estimated population: 3,233,589.
 Area & (rank): 48,523 sq. mi. (31).
 Geographic center: In Avoyelles Parish, 3 mi. SE of Marksville.
 Number of parishes (counties): 64.
 Largest cities (1960 Est.): New Orleans (621,259); Shreveport (163,663); Baton Rouge (151,596); Lake Charles (62,395); Monroe (51,931).
 State forests: 1 (8,000 ac.).
 State parks: 15 (13,323 ac.).
 State general revenue (1958-59): \$550,789,217.
 State general expenditure (1958-59): \$456,191,007.

Louisiana, which still calls its counties parishes after the Spanish religious divisions, is one of the leading states in fur trapping, with a rich annual bag of mink, muskrat, opossum and raccoon pelts. Other important agricultural products are sugar cane, sweet potatoes, rice and cotton. The state is rapidly becoming industrialized, and is an important producer of petroleum and petrochemicals, pulp and paper, natural gas, sulfur, chemicals and salt.

New Orleans, home of the Mardi Gras, avoids flooding only by an expensive levee and spillway system. Its industry is making increased use of raw materials from South and Central America. The Vieux Carré, in this Old World city, called by many the "Little Paris" of the New World, has some of the celebrated restaurants of the nation.

Louisiana has a great variety and abundance of game birds. Its state-owned wildlife sanctuaries are among the world's largest.

Hernando de Soto, in the year 1540, is usually considered the first white man to see the state, but claims are made for Narvaez, who is reputed to have seen the state as early as 1528.

MAINE

Capital: Augusta.
 Governor: John H. Reed, Rep. (to Jan. 1961).
 Secy. of State: Harold I. Goss (to Jan. 1961).
 Controller: Henry L. Cranshaw (Indefinite).
 Atty. General: Frank E. Hancock (to Jan. 1961).
 Entered Union & (rank): Mar. 15, 1820 (23).
 Present constitution adopted: 1820.
 Motto: *Dirigo* (I guide).
 State flower: White pine cone and tassel (1895).
 State tree: Pine tree.
 State bird: Chickadee (1927).
 State song: "State of Maine Song" (1937).
 Nickname: Pine Tree State.

Origin of name: From the French province of Maine.

1940 population & (rank): 847,226 (35).
 1950 population & (rank): 913,774 (35).
 1959 estimated population: 949,000.
 Area & (rank): 33,040 sq. mi. (39).
 Geographic center: In Piscataquis Co., 1 N of Dover-Foxcroft.
 Number of counties: 16.
 Largest cities (1950 Census): Portland (78,000); Lewiston (40,974); Bangor (31,558); Auburn (23,134); South Portland (21,800).
 State forests: 1 (21,000 ac.).
 State parks: 11 (203,533 ac.).
 State general revenue (1960): \$139,942,972.
 State general expenditure (1960): \$140,000,000.

Two major changes in Maine's constitution were voted in 1957: (1) the state's general election is now held in November instead of September, making the expression "As I go, so goes the nation" no longer valid; (2) the governor now has a 4-year term and may succeed himself.

Maine produces one out of every five potatoes raised in the U. S., and 95% of the nation's blueberries. The chicken broiler industry has climbed from \$300,000 after the last war to over \$46 million today.

Maine is one of the world's largest paper producers. It ranks fifth in boot and shoe manufacturing. It has the largest area in the East, and planned development promises an unending wood supply for paper mills, lumber mills and hardboard processing plants.

The state leads the world in the production of the familiar flat tins of sardines, producing 200 million of them annually. Lobstermen catch 90% of the nation's supply of true lobsters.

In 1959, the Appalachian range within the state was named the "Longfellow Mount of Maine," in honor of Henry Wadsworth Longfellow, who was born in the state. Katahdin (5,267 ft.) is the highest peak. The area is recognized as a sportsman's paradise.

MARYLAND

Capital: Annapolis.
 Governor: J. Millard Tawes, Dem. (to Jan. 1963).
 Secy. of State: Thomas B. Finan (appointed governor).
 Comptroller of the Treasury: Louis L. Gold (to Jan. 1963).
 Atty. General: C. Ferdinand Sybert (to Jan. 1962).
 Entered Union & (rank): Apr. 28, 1788 (7).
 Present constitution adopted: 1867.
 Motto: *Fatti maschii, parole femine* (Deeds, womanly words).
 State flower: Black-eyed susan (1918).
 State tree: White oak (1941).
 State bird: Baltimore oriole (1882).
 State song: "Maryland! My Maryland!" (1862).
 Nicknames: Free State; Old Line State.
 Origin of name: In honor of Henrietta (Queen of Charles I of England).
 1940 population & (rank): 1,821,244 (28).
 1950 population & (rank): 2,343,001 (24).
 1959 estimated population: 3,060,700.
 Area & (rank): 12,303 sq. mi. (42).

le center: In Anne Arundel Co., 3 mi. Collington.

of counties: 23, plus 1 independent

ities (1950 Census): Baltimore (949,- Cumberland (37,679); Hagerstown (9); Frederick (18,142); Salisbury (9).

ests: 11 (119,186 ac.).

ks: 17 (16,550 ac.).

eral revenue (1959): \$452,525,158.

eral expenditure (1959): \$450,093,361.

and is cut almost in two by Chesapeake, and the many estuaries and rivers one of the longest water fronts of any. The Bay produces more seafood—crabs, clams, fin fish—than any other body of water, and is a major center. Important agricultural products, in order of cash value, are dairy products, poultry and poultry products, tobacco, vegetables, wheat, and soy beans. The state is a leader in vegetable canning and raisin raising. Sand and gravel, lime, cement, stone, coal, and clay are the major products.

factures, which center in Baltimore, include missiles, airplanes, steel, clothing, chemicals. The port of Baltimore ranks in the country in foreign trade tonnage. Baltimore is the home of The Johns Hopkins University and Hospital. In Annapolis is the capital and home of the U. S. Naval Academy, is one of the earliest state capitals (1772-1779) still in regular use by the government.

Charter of Maryland was granted in 1701. Lord Baltimore, who died before it was issued the Great Seal; it was issued to his son, Cecil. The first settlers came to St. Mary's in 1634.

MASSACHUSETTS

Boston.

Governor: Foster Furcolo, Dem. (to Jan. 1961).

Governor: Robert F. Murphy (to Jan. 1961).

the Commonwealth: Joseph D. Ward (to Jan. 1961).

Comptroller & Receiver General: John F. Kennedy (to Jan. 1961).

Comptroller: Edward J. McCormack, Jr. (to Jan. 1961).

Entered Union & (rank): Feb. 6, 1788 (6).

Constitution adopted: 1780.

Ense petit placidam sub libertate

pacem (By the sword we seek peace, but only under liberty).

State flower: Mayflower (1918).

State tree: American elm (1941).

State bird: Chickadee (1941).

State colors: Blue and gold (in flag and seal).

State motto: None.

State name: Bay State; Old Colony State.

State name: From two Indian words meaning "great mountain place."

Population & (rank): 4,316,721 (8).

Population & (rank): 4,690,514 (9).

Estimated population: 4,951,000.

Area (rank): 8,093 sq. mi. (46).

State center: In Worcester Co., in N part of Worcester.

Number of counties: 14.

Largest cities (1955 State Census): Boston (724,702); Worcester (202,612); Springfield (166,052); New Bedford (105,488); Fall River (105,195).

State forests: 28 (170,000 ac.).

State parks: 14 (9,286 ac.).*

State general revenue (1959): \$692,459,640.

State general expenditure (1959): \$657,406,126.

* The Metropolitan District Commission, an agency of the Commonwealth serving municipalities in the Boston area, has over 14,000 acres of parkways and reservations under its jurisdiction.

Massachusetts is the leading shoe producer in the U. S., and has been one of the leaders in the making of textiles since the beginning of American history. Top-ranking industries are electrical and other machinery, leather and leather products, apparel, and other finished goods and textile mill products. Logan International Airport at East Boston, the nearest major airport in the U. S. to Europe, ranks among the world's greatest aerodromes. It has one of the longest commercial runways (10,022 ft.) and the longest air passenger terminal building in the world (3,053 ft.).

Agricultural products, ranked in order of importance (1957), are poultry, dairy products, greenhouse and nursery products, vegetables, fruit, cranberries and tobacco. The state is the leader in producing carnations and cranberries.

The growth of factories brought to this state an influx of foreigners and today Boston has one of the largest Irish populations in the nation.

Faneuil Hall in Boston was known as the "Cradle of Liberty." From the belfry of Christ Church (Old North Church), on Copp's Hill, Paul Revere received the lantern message that began his famous ride. Boston was also the site of the Battle of Bunker Hill.

The Pilgrims landed at Plymouth Rock in 1620 as the first large group to settle here but legend has it that Eric the Red and his Norsemen saw the state in the year 1000.

MICHIGAN

Capital: Lansing.

Governor: G. Mennen Williams, Dem. (to Jan. 1961).

Lieut. Governor: John B. Swainson (to Jan. 1961).

Secy. of State: James M. Hare (to Jan. 1961).

Auditor General: Otis M. Smith (to Jan. 1961).

Atty. General: Paul L. Adams (to Jan. 1961).

Organized as territory: Jan. 11, 1805.

Entered Union & (rank): Jan. 26, 1837 (26).

Present constitution adopted: 1908.

Motto: *Si quaeris peninsulam amoenam circumspice* (If you seek a pleasant peninsula, look around you).

State flower: Apple blossom (1897).

State bird: Robin (unofficial).

State animal: Wolverine (unofficial).

State song: "Michigan, My Michigan" (unofficial).

Nickname: Wolverine State.

Origin of name: From two Indian words meaning "great lake."

1940 population & (rank): 5,256,106 (7).

1950 population & (rank): 6,371,766 (7).
 1960 estimated population: 7,778,220.
 Area & (rank): 58,216 sq. mi. (22).
 Geographic center: In Wexford Co., 5 mi. W of N of Cadillac.

Number of counties: 83.

Largest cities (1960 Est.): Detroit (1,654,128); Grand Rapids (175,344); Flint (194,958); Dearborn (111,077); Saginaw (97,031); Lansing (108,128).

State forests: 23 (3,762,464 ac.).

State parks: 79 (179,556 ac.).

State general revenue (1958-59): \$1,017,281,104.

State general expenditure (1958-59): \$1,090,948,295.

On a map of Michigan, draw an eighty-five-mile circle around Detroit and it will contain the home plants of the companies that make 14 out of 16 American automobiles. This industry, which sprang up about fifty years ago from the carriage-building business, is not the only activity of this state. Airplane parts, furniture, diesel engines, hoists, pumps, boilers are among its leading items of production. Most of the nation's refrigerators are made in Michigan. On its farms are grown dry beans, grapes, peaches, potatoes, sugar beets and other food crops.

Michigan is split completely in two parts. The northern peninsula is mining and timber country. The southern part is agricultural and manufacturing country. Connecting Lakes Superior and Huron is the busiest canal in the world—the Sault Ste. Marie.

Michigan has the greatest inland fisheries in the world and markets at least 20 species from carp, trout, perch, pike to lake herring.

The state's 11,037 inland lakes and 2,242 miles of Great Lakes shoreline make it a good vacation land. The artificial ski jump on Iron Mountain is probably the highest in the world.

MINNESOTA

Capital: St. Paul.

Governor: Orville L. Freeman (to Jan. 1961).

Lieut. Governor: Karl F. Rolvag (to Jan. 1961).

Secy. of State: Joseph L. Donovan (to Jan. 1961).

State Auditor: Stafford Kling (to Jan. 1963).

Atty. General: Miles Lord (to Jan. 1961).

Organized as territory: Mar. 3, 1849.

Entered Union & (rank): May 11, 1858 (32).

Present constitution adopted: 1858.

Motto: *L'Etoile du Nord* (The North Star).

State flower: Moccasin flower (1902).

State tree: Norway pine.

State bird: None.

State song: "Hail Minnesota."

Nicknames: North Star State; Gopher State;

Land of 10,000 Lakes.

Origin of name: From a Dakota Indian word meaning "sky-tinted water."

1940 population & (rank): 2,792,300 (18).

1950 population & (rank): 2,982,483 (18).

1959 estimated population: 3,399,000.

Area & (rank): 84,068 sq. mi. (12).

Geographic center: In Crow Wing Co., 10 mi. SW of Brainerd.

Number of counties: 87.

Largest cities (1950 Census): Minneapolis (521,718); St. Paul (311,349); Duluth (104,511); Rochester (29,885); St. Cloud (28,410).

State forests: 32 (2,037,065 ac.).

State parks: 61 (84,350 ac.).

State general revenue (1959): \$874,404,353.

State general expenditure (1959): \$876,062,970.

A few square miles of Northern Minnesota, in the Mesabi, Cuyuna and Vermilion Ranges, produce most of the nation's iron ore, and provide the activity for the powerful Duluth. Farm and factory are equally important in Minnesota. Its farms produce wheat, oats, butter, eggs, milk, corn, wheat, potatoes, etc. Its factory production follows the pattern of the Midwest. Machine tools, furniture, foundry products, etc. are manufactured.

Minneapolis is the trade center of the Northwest. Its twin city, St. Paul, is the nation's biggest publisher of calendars and law books.

With over 11,000 lakes, the state is famous for its fishing, hunting and trapping.

Minnesota has many famous resort regions. Travel business for 1959 was estimated to exceed \$325 million.

In 1655, Radisson and Groseilliers, French traders from Canada, were the first white men to see the state.

MISSISSIPPI

Capital: Jackson.

Governor: Ross R. Barnett, Dem. (to Jan. 1964).

Lieut. Governor: Paul B. Johnson, Jr. (to Jan. 1964).

Secy. of State: Heber L. Ladner (to Jan. 1964).

Treasurer: Evelyn Gandy (to Jan. 1964).

Atty. General: Joe T. Patterson (to Jan. 1964).

Organized as territory: Apr. 7, 1798.

Entered Union & (rank): Dec. 10, 1817 (20).

Succeeded from Union: Jan. 9, 1861.

Re-entered Union: Feb. 23, 1870.

Present constitution adopted: 1890.

Motto: *Virtute et armis* (By valor and arms).

State flower: Flower or bloom of the magnolia or evergreen magnolia (1952).

State tree: Magnolia (1938).

State bird: Mockingbird (1944).

State song: "Way Down South in Mississippi" (1948).

Nickname: Magnolia State.

Origin of name: From an Indian word meaning "Father of Waters."

1940 population & (rank): 2,183,796 (23).

1950 population & (rank): 2,178,914 (26).

1960 estimated population: 2,162,422.

Area & (rank): 47,716 sq. mi. (32).

Geographic center: In Leake Co., 9 mi. N of Carthage.

Number of counties: 82.

Largest cities (1950 Census): Jackson (88,207).

Meridian (41,893); Biloxi (37,425); Greenville (29,936); Hattiesburg (29,474).

State forests: 1 (1,760 ac.).

State parks: 10 state-owned (10,972 ac.) and 1 state-leased (1,910 ac.).

State general revenue (1957): \$213,291,403.

State general expenditure (1957): \$210,780,240.

Mississippi, the stronghold of the

Butte, sitting on the "richest hill in the world," is the center of the area that once supplied half of the U. S. copper (its most

important mineral). Livestock, wool, lumber and dude ranching round out its interests. Agriculture is dependent on irrigation.

The state as a whole still possesses the frank character of the old days, reflected in the legend that the only reason Helena was selected as the name to replace Last Chance Gulch was because of the suggestion of profanity in the front part of that name. Glacier National Park is a popular tourist area with its rugged scenery, hunting areas and dude ranches. While little development has been made, Montana offers fine potentialities for winter sports.

NEBRASKA

Capital: Lincoln.

Governor: Ralph G. Brooks, Dem. (to Jan. 1961).

Lieut. Governor: Dwight W. Burney (to Jan. 1961).

Secy. of State: Frank Marsh (to Jan. 1961).

Atty. General: C. S. Beck (to Jan. 1961).

Organized as territory: May 30, 1854.

Entered Union & (rank): Mar. 1, 1867 (37).

Present constitution adopted: 1875 (extensively amended 1919-20).

Motto: Equality before the law.

State flower: Goldenrod (1895).

State tree: American elm (1937).

State bird: Western meadow lark (1929).

State song: "My Nebraska" (unofficial).

Nickname: Cornhusker State.

Origin of name: From an Oto Indian word meaning "flat water."

1940 population & (rank): 1,315,834 (32).

1950 population & (rank): 1,325,510 (33).

1959 estimated population: 1,456,000.

Area & (rank): 77,407 sq. mi. (15).

Geographic center: In Custer Co., 10 mi. NW of Broken Bow.

Number of counties: 93.

Largest cities (1950 Census): Omaha (251,117);

Lincoln (98,884); Grand Island (22,682);

Hastings (20,211); North Platte (15,433).

State forests: 2.

State parks: 7 (1,036 ac.).

State general revenue (1958): \$145,820,000.

State general expenditure (1958): \$142,597,000.

Nebraska lives by its expansive sea of grain, reflected in its bumper crops of rye, corn and wheat. There are more varieties of grass growing in this state, valuable for forage, than in any other state in the nation. Its sizable cattle and hog industries help to make Omaha a great stockyard and meat-packing center. Flour, freight cars, farm machinery, precision instruments, brick and tile are products of Nebraska.

Oil was discovered in 1939, and natural gas in 1949. The state was 14th in oil production in the U. S. for 1956.

In 1937, Nebraska became the only state in the Union to have a unicameral (one-house) legislature. Members are elected to it without party designation.

NEVADA

Capital: Carson City.

Governor: Grant Sawyer, Dem. (to Jan. 1963).

Lieut. Governor: Rex Bell (to 1963).

Secy. of State: John Koontz (to 1963).

Controller: Keith L. Lee (to 1963).

Atty. General: Roger D. Foley (to 1963).

Organized as territory: Mar. 2, 1861.

Entered Union & (rank): Oct. 31, 1864 (38).

Present constitution adopted: 1864.

Motto: All for our country.

State flower: Sagebrush (1917).

State tree: Pinyon pine (official).

State bird: Mountain bluebird (unofficial).

State colors: Blue and silver (unofficial).

State song: "Home Means Nevada" (1933).

Nicknames: Sagebrush State; Silver State.

Battle Born State.

Origin of name: Spanish: meaning "unclad."

1940 population & (rank): 110,247 (48).

1950 population & (rank): 160,083 (48).

1960 estimated population: 281,348.

Land area & (rank): 110,548 (7).

Geographic center: In Lander Co., 23 mi. E. Austin.

Number of counties: 17.

Largest cities (1960 Est.): Las Vegas

453; Reno (50,938); North Las Vegas

458; Sparks (16,412); Henderson (12,500).

State forests: None.

State parks: 9 (25,535 ac.).

State revenue (1959): \$60,198,242.

State expenditure (1959): \$59,327,563.

Nevada was made famous by the discovery of the fabulous Comstock Lode in 1859. Its mines have produced large quantities of gold, silver, copper, lead, zinc, mercury and tungsten. Oil was discovered in 1917. In 1954. There are also uranium deposits.

In 1931, the state created a new industry by writing an easy divorce law and Reno since become the "divorce capital of the nation." Gambling was legalized and gaming tables now pay a tax to add to the state's income.

Near Las Vegas, on the Colorado River stands the Hoover Dam which has changed its name (Hoover to Boulder Dam).

The state's agricultural crop consists mainly of hay, wheat, barley and potatoes.

Nevada was the first state to use gas chamber capital punishment.

NEW HAMPSHIRE

Capital: Concord.

Governor: Wesley Powell, Rep. (to Jan. 1963).

Secy. of State (acting): Robert L. Stark (to Jan. 1961).

Controller: Leonard S. Hill (to Dec. 1963).

Atty. General: Louis C. Wyman (to Dec. 1963).

Entered Union & (rank): June 21, 1776 (33).

Present constitution adopted: 1784.

Motto: Live free or die.

State flower: Purple lilac (1919).

State tree: White birch (1947).

State bird: Purple finch (1957).

State song: "Old New Hampshire" (1949).

Nickname: Granite State.

Origin of name: From the English county of Hampshire.

1940 population & (rank): 491,524 (45).

1950 population & (rank): 533,242 (44).

1959 estimated population: 592,000.

(rank): 9,304 sq. mi. (44).
 center: In Belknap Co., 3 mi. E of
 sd.
 of counties: 10.
 cities (1950 Census): Manchester (82,-
 Nashua (34,669); Concord (27,988);
 mouth (18,830); Berlin (16,615).
 ts: 143 (55,769 ac.).
 ks: 33 (30,976 ac.).
 eral revenue (1957): \$55,287,359.
 eral expenditure (1957): \$69,236,244.

Hampshire is the only state that ever
 most at the formal conclusion of a
 war when, in 1905, Portsmouth was
 e of the treaty ending the Russo-
 War. The sandy and stony loam of
 e needs liberal fertilization for the
 of its principal crops—fruit, truck
 es, corn, oats, hay and potatoes. Its
 nufacturing is the production of tex-
 ther goods, pulp and paper products.
 Hampshire was the first state to
 its independence from Great Britain
 adopt a constitution. Mt. Washington
 rded some of the world's strongest
 ocities, the last recording of record
 ns being registered at 231 miles per
 e state also has the largest legislative
 varies from 375 to 400.

,300 lakes and good climate for both
 sports and summer vacations, the
 highly popular as a resort area.

NEW JERSEY

renton.
 Robert B. Meyner, Dem. (to Jan.
 State: Edward J. Patten (to Jan.
 : John A. Kervick (to Jan. 1962).
 eral: David D. Furman (to Jan.

Union & (rank): Dec. 18, 1787 (3).
 onstitution adopted: 1947.
 erty and prosperity.
 er: Purple violet (1913).
 : Eastern goldfinch (1935).
 : Red oak (1950).
 rs: Buff and blue.
 g: None.
 : Garden State.

name: From the Channel Isle of

lation & (rank): 4,160,165 (9).
 lation & (rank): 4,835,329 (8).
 ated population: 6,018,570.
 rank): 8,204.37 sq. mi. (46).
 e center: In Mercer Co., 5 mi. SE of
 ate capital.
 f counties: 21.
 ies (1950 Census): Newark (438,776);
 City (299,017); Paterson (139,336);
 a (128,009); Camden (124,555).
 ts: 11 (155,221 ac.).
 s: 23 (26,825 ac.).
 al revenue (1959-60): \$765,682,617.
 al expenditure (1959-60): \$741,732,678.

ersey, situated in an area of wide
 l diversification between the major
 of Philadelphia and New York, is

known as the crossroads of the East. Prod-
 ucts from over 15,000 factories and shops can
 be delivered overnight to about 52 million
 people, representing 12 states and the District
 of Columbia. The greatest single industry is
 chemicals, and New Jersey is one of the fore-
 most research centers of the world. Oil refin-
 ing and shipbuilding are represented at Lin-
 den and Camden by some of the largest
 installations of their kind.

Of the total land area, 43% is forested and
 nearly 34.6% is devoted to agriculture. The
 state rates high in practically all garden
 vegetables. Among its fruit crops are the
 famous cultivated blueberries, which origi-
 nated in New Jersey. The poultry industry
 is one of the principal phases of the state's
 agriculture, and dairying occupies a promi-
 nent place.

The oldest U. S. highway of any length
 was built in Sussex County. The New Jersey
 Turnpike links New York, Pennsylvania and
 Delaware. Its new span at Florence over the
 Delaware River connects with the Pennsylv-
 ania Turnpike, giving motorists an unin-
 terrupted road from New York to Chicago.
 Garden State Parkway (toll) is now open
 from Cape May to the N. Y. Thruway (173
 mi.).

Its fortunate topography and geographic
 location make New Jersey a popular resort
 state with over 100 resort areas.

NEW MEXICO

Capital: Santa Fe.
 Governor: John Burroughs, Dem. (to Jan.
 1961).
 Lieut. Governor: Edward V. Mead (to Jan.
 1961).
 Secy. of State: Betty Florina (to Jan. 1961).
 Atty. General: Hilton A. Dixon, Jr. (to Jan.
 1961).
 Organized as territory: Sept. 9, 1850.
 Entered Union & (rank): Jan. 6, 1912 (47).
 Present constitution adopted: 1912.
 Motto: *Crescit eundo* (It grows as it goes).
 State flower: Yucca (1927).
 State tree: Piñon (1949).
 State bird: Road runner (1949).
 State fish: Cutthroat trout (1955).
 State colors: Flaming red and golden orange
 (1915).
 State song: "O, Fair New Mexico" (1916).
 Nicknames: Land of Enchantment; Sunshine
 State.

Origin of name: From the country of Mexico.
 1940 population & (rank): 531,818 (42).
 1950 population & (rank): 681,187 (39).
 1959 estimated population: 940,000.
 Area & (rank): 121,666 sq. mi. (5).
 Geographic center: In Torrance Co., 12 mi. W
 of S of Willard.
 Number of counties: 32.
 Largest cities (1950 Census): Albuquerque
 (96,815); Santa Fe (27,998); Roswell (25,-
 738); Carlsbad (17,975); Clovis (17,318).
 State forests: 300,000 ac. of forested lands.
 State parks: 8 (92,818 ac.).
 State general revenue (1959): \$230,290,000.
 State general expenditure (1959): \$209,136,000.

New Mexico's chief industries are mining

and the raising of cattle and crops. Irrigation is vital.

The state contains the largest Indian reservation in the U. S. with over 16,000,000 acres, inhabited by the Navajo tribe. The Apaches and Utes live in three other reservations in this state (the Jicarilla Apache, at Horse Lake; the Mescalero Apache, northeast of Alamogordo; the Navajo, in San Juan and McKinley counties; and the Southern Ute, in the northern part of San Juan County). Carlsbad Caverns, the largest in the world, attract many visitors annually. The Rio Grande State Park, established in March, 1959, will be over 80 miles long when it is fully developed.

The state's dry and healthful climate makes it a great recuperative mecca for tuberculars. Santa Fe, the oldest seat of government in the U. S., was founded by the Spaniards in 1609-10.

Los Alamos is the site of an atomic-energy laboratory. The first atomic explosion in history was at the Alamogordo air base. The state exceeds all others in the production and milling of uranium ore.

NEW YORK

Capital: Albany.

Governor: Nelson A. Rockefeller, Rep. (to Jan. 1963).

Lieut. Governor: Malcom Wilson, Rep. (to Jan. 1963).

Secy. of State: Caroline K. Simon (apptd. by Gov.).

Comptroller: Arthur Levitt, Dem. (to Jan. 1963).

Atty. General: Louis J. Lefkowitz, Rep. (to Jan. 1963).

Entered Union & (rank): July 26, 1788 (11).

Present constitution adopted: 1777 (last revised 1938).

Motto: *Excelsior* (Ever upward).

State flower: Rose (1955).

State tree: Sugar maple (1956).

State bird: Bluebird (unofficial).

State song: None.

Nickname: Empire State.

Origin of name: In honor of the English Duke of York.

1940 population & (rank): 13,479,142 (1).

1950 population & (rank): 14,830,192 (1).

1960 estimated population: 16,600,000.

Area & (rank): 49,576 sq. mi. (30).

Geographic center: In Madison Co., 6 mi. E of S of Oneida.

Number of counties: 62.

Largest cities (1960 Est.): New York (7,710,346); Buffalo (528,387); Rochester (316,074); Syracuse (215,291); Yonkers (191,327).

State Forest Preserves: Adirondacks, 2,252,269 ac.; Catskills, 235,076 ac.

State parks: 84 (approx. 200,000 ac., including parkways).

State general fund income (1959): \$1,550,350,058.

State general fund outgo (1959): \$1,550,225,180.

New York, with the great metropolis of New York City, is the spectacular nerve center of the nation. It leads in population, manufacturing, foreign trade, commercial and financial transactions, book and magazine publishing, theatrical production, etc.

New York City is not only a national but an international leader. It is the busiest seaport in the world; New York International Airport is one of the busiest in the world. First in manufacturing since 1824, the city today has a gigantic clothing and fur industry and also makes chemicals, paints, drugs, machinery, paper, wood, and textile products and houses the tallest buildings in the world.

Nearly all the rest of the state's manufacturing is done along the Hudson River north to Albany and through the Mohawk Valley, Central New York, and Southern Tier regions to Buffalo. The St. Lawrence seaway and power projects are opening the New Country to industrial expansion. The seaway has given the state a second seacoast, and the power project is the second largest power source on the continent. By 1961, when the Niagara power development begins operations, New York State will have the largest hydroelectric installation in the free world.

Planes, heavy and light electrical equipment, locomotives, radio and TV sets, automobiles and parts, washing machines, typewriters, photographic and optical equipment, shirts, and flour are manufactured. Dairy, truck gardening, and the raising of potatoes, onions, and cabbage keep the New York farmer prosperous. Winemaking is a major industry in the state.

New York's extremely rapid commercial growth may be partly attributed to Governor De Witt Clinton, who pushed through the construction of the Erie Canal (Buffalo to Albany) which was opened in 1825. Today the 559-mile New York Thruway connects New York City with Buffalo and with Connecticut, Massachusetts and Pennsylvania express highways. Two new toll-free superhighways, the Adirondack Northway (linking Albany with the Canadian border) and the North-South-Expressway (crossing central New York from the Pennsylvania border to the Thousand Islands) are under construction.

The convention and tourist business are one of the state's greatest sources of income.

For a short time, New York City was the U. S. Capital and George Washington was inaugurated there as the first President on April 30, 1789.

Plans for observance of the centennial of the Civil War (1961-65) and for a New York Worlds' Fair in 1964-65 were approved by legislation adopted in 1960.

NORTH CAROLINA

Capital: Raleigh.

Governor: Luther H. Hodges, Dem. (to Jan. 1961).

Lieut. Governor: Luther E. Barnhardt (to Jan. 1961).

Secy. of State: Thad Eure (to Jan. 1961).

Auditor: Henry L. Bridges (to Jan. 1961).

Atty. General: T. W. Bruton (to Jan. 1961).

Entered Union & (rank): Nov. 21, 1789 (12).

Seceded from Union: May 20, 1861.

Re-entered Union: July 20, 1868.

Present constitution adopted: 1876.

Motto: *Esse quam videri* (To be rather than to seem) (1893).

ver: Dogwood (1941).
 i: Cardinal (1943).
 g: "The Old North State" (1927).
 rs: Red and blue (1945).
 : Tar Heel State.
 name: In honor of Charles I of Eng-

ulation & (rank): 3,571,623 (11).
 lation & (rank): 4,061,929 (10).
 ated population: 4,523,651.
 rank): 52,712 sq. mi. (28).
 e center: In Chatham Co., 10 mi.
 Sanford.
 of counties: 100.
 cities (1960 Est.): Charlotte (200,-
 Winston-Salem (110,443); Greensboro
 3); Durham (77,566); Raleigh (93,-

sts: 1.
 ks: 11 (35,628 ac.).
 nue (excluding Federal funds, 1959-60):
 0,809.
 nditure (excluding Federal Funds, 1959-
 16,064,286.

Carolina is the nation's largest to-
 and textile producer. It holds first
 the Southeast in population and
 ue of its industrial and agricultural
 on. This production is highly diver-
 ith furniture, chemicals and paper
 ing enormous industries. Tobacco,
 tton, hay, peanuts and truck and
 crops are of major importance.
 ate leads the South in social and
 reforms. Its educational pay scale
 ame for white and Negro teachers.
 are 18 state and national parks and
 ncluding the Great Smoky Moun-
 tional Park, the Blue Ridge Park-
 the new Cape Hatteras National
 Mt. Mitchell, on the Parkway near
 is the 'highest mountain in the
 U. S. (6,684 ft. above sea level).

argest military reservation in the
 ort Bragg) and the largest Marine
 us training base (Camp LeJeune)
 orth Carolina.

st English colony in America was
 ed on Roanoke Island in 1585. Vir-
 e, who was born there in 1587, was
 child of English parentage born in

NORTH DAKOTA

Bismarck.
 John E. Davis, Rep. (to Jan. 1961).
 ernor: C. P. Dahl (to Jan. 1961).
 ate: Ben Meier (to Jan. 1961).
 Curtis Olson (to Jan. 1961).
 eral: Leslie R. Burgum (to Jan.

as territory: Mar. 2, 1861.
 ion & (rank): Nov. 2, 1889 (39).
 nstitution adopted: 1889.
 berty and union, now and forever:
 d inseparable.
 r: Wild prairie rose (1907).
 : American elm (1947).
 : Western meadow lark (1947).
 : "North Dakota Hymn" (1947).
 : Sioux State; Flickertail State.

Origin of name: From the Dakotah tribe,
 meaning "allies."

1940 population & (rank): 641,935 (39).
 1950 population & (rank): 619,636 (41).
 1960 estimated population: 626,976.
 Area & (rank): 70,665 sq. mi. (17).
 Geographic center: In Sheridan Co., 5 mi. SW
 of McClusky.
 Number of counties: 53.
 Largest cities (1950 Census): Fargo (38,256);
 Grand Forks (26,836); Minot (22,032); Bis-
 marck (18,640); Jamestown (10,697).
 State forests: None.
 State parks: 5 (2,981 ac.).
 State collections (1958): \$122,341,002.
 State disbursements (1958): \$120,830,537.

North Dakota, politically progressive,
 operates the only state-owned bank, flour
 mill and grain elevator in the nation. The
 state owes its main activity to agriculture
 with over 87 per cent of its acreage devoted
 to the growth of barley, wheat, rye, oats and
 livestock. Most of its manufacturing consists
 of dairy products.

The finest farming land is in the Red
 River Valley, celebrated in song. Cattle rais-
 ing is centered in the Missouri Valley.

"Number One Northern Hard," a wheat
 first grown in this state, still brings
 premium prices for its excellence of quality.

The completion of Garrison Dam on the
 Missouri River will result in extensive irriga-
 tion and the production of 400,000 kw. of
 electricity for use in the Missouri Basin
 areas.

In 1951, oil was discovered near Tloga by
 the Amerada Petroleum Corp. Geologists be-
 lieve that the state holds two-thirds of the
 nation's lignite.

The geographic center of the North Amer-
 ican continent is located in Pierce County,
 latitude 48°10'N, longitude 100°10'W.

OHIO

Capital: Columbus.
 Governor: Michael V. DiSalle, Dem. (to Jan.
 1963).
 Lieut. Governor: John W. Donahey (to Jan.
 1963).
 Secy. of State: Ted W. Brown (to Jan. 1963).
 Auditor: James A. Rhodes (to Jan. 1961).
 Atty. General: Mark McElroy (to Jan. 1963).
 Entered Union & (rank): Mar. 1, 1803 (17).
 Present constitution adopted: 1851.
 Motto: With God, all things are possible.
 State flower: Scarlet carnation (1904).
 State bird: Cardinal (1933).
 State song: None.
 Nickname: Buckeye State.
 Origin of name: From an Iroquoian word
 meaning "great river."
 1940 population & (rank): 6,907,612 (4).
 1950 population & (rank): 7,946,627 (5).
 1960 estimated population: 9,732,558.
 Area & (rank): 41,222 sq. mi. (36).
 Geographic center: In Delaware Co., 25 mi.
 N of Columbus.
 Number of counties: 88.
 Largest cities (1950 Census): Cleveland (914,-
 808); Cincinnati (503,998); Columbus
 (375,901); Toledo (303,616); Akron (274,605).

State forests: 20 (145,281 ac.).
 State parks: 55 (22,074 ac.).
 State general revenue (1958-59): \$1,421,642,714.
 State general expenditure (1958-59): \$1,394,492,-247.

With vast coal and oil fields on the one hand, with Great Lakes iron ore close by on the other, Ohio automatically developed into one of the nation's greatest industrial states. The vast and varied factory output of its cities runs from wire, nails, nuts, bolts, paper, radios, cash registers, golf clubs, refrigerators to motors of all kinds and sizes. Cleveland is one of the world's largest handlers of iron ore. Toledo is the nation's largest shipper of coal. Akron makes most of the automobile tires used in the U. S.

Ohio's thousands of factories almost overshadow its importance in two other basic industries—mining and agriculture. Its fertile soil produces soy beans, corn, wheat, grapes and tobacco. Dairying and greenhouse products are important. Mining is centered in coal, oil, sand, gravel and clay.

OKLAHOMA

Capital: Oklahoma City.
 Governor: J. Howard Edmondson, Dem. (to Jan. 1963).
 Lieut. Governor: George Nigh (to Jan. 1963).
 Secy. of State: William N. Christian (to Jan. 1963).
 Treasurer: William A. Burkhardt (to Jan. 1963).
 Atty. General: Mac Q. Williamson (to Jan. 1963).
 Organized as territory: May 2, 1890.
 Entered Union & (rank): Nov. 16, 1907 (46).
 Present constitution adopted: 1907.
 Motto: *Labor omnia vincit* (Labor conquers all things).
 State flower: Mistletoe (1893).
 State tree: Redbud (1937).
 State bird: Scissor-tailed Flycatcher (1951).
 State colors: Green and white (1915).
 State song: "Oklahoma" (1953).
 Nickname: Sooner State.
 Origin of name: From two Choctaw Indian words meaning "red people."
 1940 population & (rank): 2,336,434 (22).
 1950 population & (rank): 2,233,351 (25).
 1960 estimated population: 2,300,477.
 Area & (rank): 69,919 sq. mi. (18).

Geographic center: In Oklahoma Co., 8 mi. N of Oklahoma City.
 Number of counties: 77.
 Largest cities (1950 Census): Oklahoma City (243,504); Tulsa (182,740); Muskogee (37,-289); Enid (36,017); Lawton (34,757).
 State forests: None.
 State parks: 14 (47,813.42 ac.).
 Total state revenue (1958-59): \$457,179,019.
 Total state expenditure (1958-59): \$448,509,837.

Oil has made Oklahoma a rich state and Tulsa one of the world's wealthiest cities per capita. The smelting of zinc, oil refining, meat packing and flour milling are its chief factory industries. Wheat, corn, oats, cotton, sorghums and potatoes are its agricultural crops of chief importance.

In 1834, Oklahoma was set aside as Indian Territory. It remained so until Apr. 22, 1889,

when the first opening to homestead settlement occurred. On that one day, 50,000 persons swarmed in, and the term "sooners" born to apply to those who had sneaked the state sooner than the noon deadline series of land openings by "runs" and territories extended through 1901, and sales sealed bid of remaining lands were held 1906 and 1910.

In 1959, Oklahomans voted to end state prohibition law, which had been in effect for 51 years.

OREGON

Capital: Salem.
 Governor: Mark O. Hatfield, Rep. (to 1963).
 Secy. of State: Howell Appling, Jr. (to 1961).
 State Treasurer: Howard C. Belton (to 1961).
 Atty. General: Robert Y. Thornton (to 1961).
 Organized as territory: Aug. 14, 1848.
 Entered Union & (rank): Feb. 14, 1859 (33).
 Present constitution adopted: 1859.
 Motto: The Union (1957).
 State flower: Oregon grape (1899).
 State tree: Douglas fir (1939).
 State bird: Western meadow lark (1927).
 State colors: Navy blue and gold (1959).
 State song: "Oregon, My Oregon" (1927).
 Nickname: Beaver State.
 Origin of name: Unknown. However, it is generally accepted that the name, first used by Jonathan Carver in 1778, was taken from the writings of Maj. Robert Rogers, an English army officer.
 1940 population & (rank): 1,089,684 (34).
 1950 population & (rank): 1,521,341 (32).
 1960 estimated population: 1,756,366.
 Area & (rank): 96,981 sq. mi. (10).
 Geographic center: In Crook Co., 25 mi. E. of Prineville.
 Number of counties: 36.
 Largest cities (1960 Est.): Portland (50,339); Salem (49,166); Eugene (50,137); Medford (24,246); Corvallis (20,437).
 State forests: 736,766.29 ac. in 16 counties.
 State parks: 174 (59,490 ac.).
 State general revenue (1959): \$303,652,000.
 State general expenditure (1959): \$341,835,000.

Oregon, with the greatest U. S. reserve of standing timber, has a billion-dollar forestry industry. Its salmon fishing industry, centered at Astoria at the mouth of the Columbia River, is one of the world's largest.

In agriculture, the state leads in growing peppermint, holly, lily bulbs, caneberry filberts, Blue Lake beans and cover crops, and also raises strawberries, wheat and other grains, sugar beets, potato, green peas, fiber flax, dairy products, livestock and poultry.

Crater Lake National Park, Mount Hood and Bonneville Dam on the Columbia are major tourist attractions.

With the low-cost electric power provided by Bonneville Dam, McNary Dam and other dams in the Pacific Northwest, Oregon developed steadily as a manufacturing state. Leading manufactures are lumber and pulp.

metalwork, machinery, aluminum, s, paper and food processing.

PENNSYLVANIA

Harrisburg.

David L. Lawrence, Dem. (to Jan.

Governor: John M. Davis (to Jan. 1963).

the Commonwealth: John S. Rice (in-

General: Charles C. Smith (to May

eral: Anne K. Alpern (indefinite).

Union & (rank): Dec. 12, 1787 (2).

Constitution adopted: 1874.

rtue, liberty and independence.

er: Mountain laurel (1933).

: Hemlock (1931).

: Ruffed grouse (1931).

rs: Blue and gold.

: None.

: Keystone State.

name: In honor of Adm. Sir William

father of William Penn. It means

Woodland."

lation & (rank): 9,900,180 (2).

ation & (rank): 10,498,012 (3).

ated population: 11,219,034.

ank: 45,333 sq. mi. (33).

e center: In Center Co., 2 1/2 mi. SW

efonte.

counties: 67.

cities (1960 Est.): Philadelphia

36); Pittsburgh (600,684); Erie

); Scranton (109,891); Reading

ts: 20 (1,879,917 ac.).

s: 70 (170,370 ac., incl. other recre-

spots).

venue subject to appropriations (bien-

ding May 31, 1959): \$1,612,093,527.*

enditures (biennium ending May 31,

1,539,590,302.†

ot include \$657,643,264 motor fund revenue.

ot include \$609,950,618 expenditure for the

tations of the highway department.

he steel mills of Pittsburgh through

state coal mines and oil wells to

ards and factories of Philadelphia,

nia bristles with heavy industry.

ately 26% of all American iron and

ade in Pennsylvania. Other manu-

include locomotives, boilers, en-

ast furnaces, trucks, buses, wire,

knit goods and nylon and rayon

Virtually all of the U. S. anthra-

coal) deposits are located in

nia.

ural products include apples,

potatoes, corn, hay, barley, wheat,

and tobacco.

vania is rich in historical lore.

nia was the seat of the Federal

at almost continuously from 1776

, and there the Declaration of In-

ce was signed and the Constitution

. Valley Forge, of the Revolution,

ysburg, the turning-point of the

, are both in Pennsylvania. The

ell stands in Independence Square

elphia.

RHODE ISLAND

Capital: Providence.

Governor: Christopher Del Sesto, Rep. (to Jan. 1961).

Lieut. Governor: John A. Notte, Jr. (to Jan. 1961).

Secy. of State: August P. La France (to Jan. 1961).

Controller: Charles W. Hill (civil service).

Atty. General: J. Joseph Nugent (to Jan. 1961).

Entered Union & (rank): May 29, 1790 (13).

Present constitution adopted: 1843.

Motto: Hope.

State flower: Violet (unofficial).

State tree: Maple (unofficial).

State bird: Rhode Island Red (official).

State colors: Blue, white and gold (in state flag).

Song: "Rhode Island" (1946).

Nickname: Little Rhody.

Origin of name: From the Greek island of Rhodes.

1940 population & (rank): 713,346 (36).

1950 population & (rank): 791,896 (36).

1960 estimated population: 841,852.

Area & (rank): 1,214 sq. mi. (50).

Geographic center: In Kent Co., 2.8 mi. S by W of Crompton.

Number of counties: 5.

Largest cities (1960 Est.): Providence (206,-

352); Pawtucket (80,492); Warwick (68,-

281); Cranston (65,694); Woonsocket 46,-

890).

State forests: 9 (15,600 ac.).

State parks: 7 (8,196 ac.).

State general revenue (1959): \$102,433,078.

State general expenditure (1959): \$105,548,359.

Rhode Island, with the greatest density of population barring the District of Columbia, boasts one of the highest proportion of industrial workers of all the states. Leading industry is textiles, largely concentrated in Providence County, particularly Pawtucket and Woonsocket. However, today the combined metal and machinery groups exceed textiles in importance.

Providence is one of the largest U. S. jewelry centers, and is important in the production of machinery and metal products.

With more than eight-tenths of the population living in urban areas, adjacent parts of the state are interested in dairying, poultry and truck farming. Nursery and greenhouse products and stock, potatoes, corn, apples, oats and hay lead the crop list. Of the state's land area, about one-tenth is farm cropland and open pasture; six-tenths is forested.

Newport is the site of the Naval War College and was long a show place for the luxurious summer homes built by some of New York's wealthiest people. The U. S. Naval Air Station is at Quonset in the town of North Kingstown.

Roger Williams founded Providence, and subsequently Rhode Island, in 1636.

SOUTH CAROLINA

Capital: Columbia.

Governor: Ernest F. Hollings, Dem. (to Jan. 1963).

Lieut. Governor: Burnet R. Maybank (to Jan. 1963).
 Secy. of State: O. Frank Thornton (to Jan. 1963).
 Comptroller General: Eldridge C. Rhodes (to Jan. 1963).
 Atty. General: Daniel R. McLeod (to Jan. 1963).
 Entered Union & (rank): May 23, 1788 (8).
 Seceded from Union: Dec. 20, 1860.
 Re-entered Union: July 18, 1868.
 Present constitution adopted: 1895.
 Mottoes: *Animus opibusque parati* (Prepared in mind and resources) and *Dum spiro spero* (While I breathe, I hope).
 State flower: Carolina yellow jessamine (1924).
 State tree: Palmetto tree (1939).
 State bird: Carolina wren (1948).
 State song: "Carolina" (1911).
 Nickname: Palmetto State.
 Origin of name: In honor of Charles II of England.
 1940 population & (rank): 1,899,804 (26).
 1950 population & (rank): 2,117,027 (27).
 1960 estimated population: 2,359,234.
 Area & (rank): 31,055 sq. mi. (40).
 Geographic center: In Richland Co., 13 mi. SE of Columbia.
 Number of counties: 46.
 Largest cities (1950 Census): Columbia (86,914); Charleston (70,174); Greenville (58,161); Spartanburg (36,795); Rock Hill (24,502).
 State forests: 4 (123,000 ac.).
 State parks: 22 (46,000 ac.).
 State total revenue (1959-60): \$214,096,728.
 State general expenditure (1959-60): \$214,096,728.

Once primarily agricultural, South Carolina has built so many big textile and other mills that today the state's factories are eight times the output of its farms in cash value. Agriculture has not, however, been completely replaced and today the chief products are livestock, cotton, tobacco, peaches, corn, hay, oats, sweet potatoes, and peanuts, which are enhanced by the recent development of modern soil-conservation methods. Charleston makes asbestos, wood, pulp, and steel products.

Civil War hostilities were started in this state at Charleston, when, on April 12, 1861, South Carolina men bombarded and captured Fort Sumter.

SOUTH DAKOTA

Capital: Pierre.
 Governor: Ralph Herseth, Dem. (to Jan. 1961).
 Lieut. Governor: John Lindley (to Jan. 1961).
 Secy. of State: Selma Sandness (to Jan. 1961).
 State Auditor: Harriett Horning (to Jan. 1961).
 Atty. General: Parnell Donohue (to Jan. 1961).
 Organized as territory: Mar. 2, 1861.
 Entered Union & (rank): Nov. 2, 1889 (40).
 Present constitution adopted: 1889.
 Motto: Under God the people rule.
 State flower: American pasqueflower (1903).
 State tree: Black Hills spruce (1947).
 State bird: Ring-necked pheasant (1943).
 State animal: Coyote (1949).
 State colors: Blue and gold (in state flag).
 State song: "Hall! South Dakota" (1943).

Nicknames: Sunshine State; Coyote State.
 Origin of name: Same as for North Dakota.
 1940 population & (rank): 842,961 (38).
 1950 population & (rank): 852,740 (40).
 1960 estimated population: 876,738.
 Area & (rank): 77,047 sq. mi. (16).
 Geographic center: In Hughes Co., 8 mi. E of Pierre.
 Number of counties: 67 (64 county governments).
 Largest cities (1960 Est.): Sioux Falls (24,024); Rapid City (22,141); Aberdeen (22,897); Huron (14,077); Watertown (10,048).
 State forests: 4 (86,000 ac.).
 State parks: 10 (90,000 ac.).
 State general revenue (1958-59): \$123,741,429.
 State general expenditure (1958-59): \$123,741,429.

* The acreage shown includes 92 recreation areas and 50 roadside parks in addition to the 11 state parks.

Seventy-five per cent of the population of South Dakota is actively interested in agriculture. Its leading crops are rye, barley, corn, wheat. Cattle raising and dairying are its stronger industries. The richest U. S. gold mine, the Homestake, is at Lead.

The Black Hills, a great tourist attraction, are the highest mountains east of the Rockies. Mt. Rushmore, in this group, is celebrated for the likenesses of Washington, Jefferson, Lincoln and Theodore Roosevelt, which were carved in stone by the sculptor Gutzon Borglum. The Badlands offer scenic masses of bare rock and clay, relieved by any vegetation. It was in 1862, that the Sioux Indians, angered at the influx of the white men who were seeking for gold, started the hostilities which ended in Custer's Massacre, on June 25, 1876, in Montana. A 600-ft. likeness of a Sioux chief is now being carved on Crazy Horse Mountain.

TENNESSEE

Capital: Nashville.
 Governor: Buford Ellington, Dem. (to Jan. 1963).
 Lieut. Governor: William D. Baird (to Jan. 1961).
 Secy. of State: Joe C. Carr (to Jan. 1961).
 Comptroller: William R. Snodgrass (to Jan. 1961).
 Atty. General: George F. McCanless (to Jan. 1966).
 Entered Union & (rank): June 1, 1796 (16).
 Seceded from Union: June 24, 1861.
 Re-entered Union: July 24, 1868.
 Present constitution adopted: 1870, amended first time 1953.
 Motto: Agriculture, commerce.
 State flower: Iris (1933).
 State tree: Tulip poplar (1947).
 State bird: Mockingbird (1933).
 Songs: "My Homeland, Tennessee" (1911) and "When It's Iris Time in Tennessee" (1935).
 Nickname: Volunteer State.
 Origin of name: From the name of the ancient capital of the Cherokee tribe.
 1940 population & (rank): 2,915,841 (15).

ulation & (rank): 3,291,718 (16).
 mated population: 3,536,240.
 (rank): 42,246 sq. mi. (34).
 ic center: In Rutherford Co., 5 mi. NE
 rffreesboro.
 of counties: 95.
 cities (1960 Est.): Memphis (491,-
 Nashville (167,357); Chattanooga
 96); Knoxville (110,089); Jackson
).
 ests: 14 (155,752 ac.).
 ks: 21 (130,000 ac.).
 eral revenue (1958-59): \$428,393,000.
 eral expenditure (1958-59): \$440,654,-

ssie won world prominence in 1945,
 atom bomb was made possible by the
 Engineer Works at Oak Ridge.

ate is now predominately industrial,
 oduction including chemicals, food,
 , virgin aluminum, shoes, lumber
 , and metal work. Mineral products
 phosphates, zinc, copper, lead, sinter
 rites, high-grade pottery clay, coal
 ble. Tennessee's agricultural produc-
 udes livestock, cotton, corn, tobacco,
 ry products, poultry and eggs.

sssee is the home of TVA, which op-
 dams and distributes power from 3
 the Cumberland River maintained
 Army Corps of Engineers. Benefits of
 atrol, navigation and electrical power
 to 6 other states (Kentucky, Alabama,
 rolina, Georgia, Virginia, and Missis-
 he Tennessee River, already the most
 ly used major river in the world, is
 nt to supply energy needs, and the
 ystem is being doubled by use of
 enerating plants.

TEXAS

Austin.
 Price Daniel, Dem. (to Jan. 1961).
 vernor: Ben Ramsey (to Jan. 1961).
 State: Zollie Steakley (to Jan. 1961).
 er: Robert S. Calvert (to Jan. 1961).
 eral: Will Wilson (to Jan. 1961).
 nion & (rank): Dec. 29, 1845 (28).
 rom Union: Mar. 2, 1861.
 d Union: Mar. 30, 1870.
 nstitution adopted: 1876.
 iendship.
 er: Bluebonnet (1901).
 : Pecan (1919).
 : Mockingbird (1927).
 g: "Texas, Our Texas" (1930).
 Lone Star State.
 name: From an Indian word mean-
 iends."
 nation & (rank): 6,414,824 (6).
 nation & (rank): 7,711,194 (6).
 mated population: 9,513,000.
 ank): 267,339 sq. mi. (2).
 e center: In McCulloch Co., 20 mi.
 Brady.
 of counties: 254.
 ties (1950 Census): Houston (596,-
 Dallas (434,462); San Antonio (408,-
 Fort Worth (278,778); Austin
).

State forests: 4 (6,306 ac.).
 State parks: 60 (46 developed).
 State revenue receipts (1958-59): \$1,139,143,544.
 State govt. cost (1958-59): \$1,163,593,583.

Texas is the richest political subdivision
 in the world with the possible exception
 of the Russian Ukraine, and is the only
 state that may, by Congressional statute,
 divide into five parts if it so desires. There
 is very little possibility of this ever being
 done because Texas and Texans live by
 its bigness. Texas is a natural leader in
 oil, natural gas, cotton, cattle, helium, sheep,
 wool, onions, and turkeys.

The distance from El Paso to Beaumont
 is a greater distance than from New York
 to Chicago. Over the Neches River, at Port
 Arthur, is the most elevated highway bridge
 over tidal waters in the world.

Cabeza de Vaca explored the state in 1528.
 Since 1685, it has been under the jurisdiction
 of 6 separate governments: those of France,
 Spain, Mexico, the Republic of Texas, the
 Confederacy, and the United States.

UTAH

Capital: Salt Lake City.
 Governor: George D. Clyde, Rep. (to Jan.
 1961).
 Secy. of State: Lamont F. Toronto (to Jan.
 1961).
 Atty. General: Walter L. Budge (to Jan. 1961).
 Organized as territory: Sept. 9, 1850.
 Entered Union & (rank): Jan. 4, 1896 (45).
 Present constitution adopted: 1896.
 Motto: Industry.
 State flower: Sego lily (1911).
 State tree: Blue spruce (1933).
 State bird: Seagull (1955).
 State emblem: Beehive.
 State song: "Utah, We Love Thee."
 Nickname: Beehive State.
 Origin of name: From the Ute tribe, mean-
 ing "people of the mountains."
 1940 population & (rank): 550,310 (41).
 1950 population & (rank): 688,862 (38).
 1960 estimated population: 882,924.
 Area & (rank): 84,916 sq. mi. (11).
 Geographic center: In Sanpete Co., 3 mi. N of
 Mantli.
 Number of counties: 29.
 Largest cities (1960 Est.): Salt Lake City
 (187,362); Ogden (69,015); Provo (35,914);
 Orem (18,383); Logan (17,464).
 State forests: None.
 State parks: 11 (13,989 ac.).
 Total state receipts (1958-59): \$183,336,758.
 Total state disbursements (1958-59): \$187,004,-
 165.

Utah, rich in natural resources, has long
 been recognized for its copper, gold, silver,
 lead and zinc. Also, it produces all the ele-
 ments necessary for the manufacture of
 steel: iron, lime, dolomite, fluorspar, manga-
 nese and coal for coking. The state is also
 developing an oil industry and in 1959 rose
 to 11th in rank among states in total pro-
 duction.

Utah's crops requiring extensive irrigation include sugar beets, potatoes, hay, onions and wheat. Various garden crops, such as beans, peas and tomatoes, and fruits, such as pears, peaches, apples and apricots, make up an ever-growing industry. Eggs and commercial poultry are also among the products of Utah.

Brigham Young led the Mormons into the area in 1847.

Great Salt Lake, lying in the north central area, has long been a world wonder. It has no known outlet, and its salt content is about six times that of the ocean. Because of its natural beauty and pioneer culture, Utah is an ideal place for tourists to visit.

VERMONT

Capital: Montpelier.

Governor: Robert T. Stafford, Rep. (to Jan. 1961).

Lieut. Governor: Robert S. Babcock (to Jan. 1961).

Secy. of State: Howard E. Armstrong (to Jan. 1961).

Auditor of Accounts: David V. Anderson (to Jan. 1961).

Atty. General: Thomas M. Debevoise (to Jan. 1961).

Entered Union & (rank): Mar. 4, 1791 (14).

Present constitution adopted: 1793.

Motto: Vermont—freedom and unity.

State flower: Red clover (1894).

State tree: Sugar maple (1949).

State bird: Hermit thrush (1941).

State song: "Hall to Vermont" (1937).

Nickname: Green Mountain State.

Origin of name: From the French, meaning "green mountain."

1940 population & (rank): 359,231 (46).

1950 population & (rank): 377,747 (45).

1960 estimated population: 387,090.

Area & (rank): 9,609 sq. mi. (43).

Geographic center: In Washington Co., 4.5 mi. SSE of Roxbury Village.

Number of counties: 14.

Largest cities (1960 Est.): Burlington (35,403); Rutland (18,302); Barre (10,361);

Montpelier (8,702); St. Albans (8,760).

State forests: 28 (82,690 ac.).

State parks: 26 (7,314.5 ac.).

State revenue (1959): \$87,741,050.

State expenditure (1959): \$89,626,280.

Vermont, the only New England state without a seacoast (and the last to be settled because of this), leads the nation in marble, granite, asbestos and maple syrup production. In ratio to population it keeps more dairy cows than any other state. Vermont's soil is devoted to dairying, truck farming and fruit growing, its rugged area precluding extensive farming. This same quality, however, along with a bracing dry climate, makes the state popular as a summer resort and as a center of winter sports.

From 1777 to 1791, Vermont was an independent state of indefinite status with some national perquisites and then was the first state after the original thirteen to join the Union. It was also the first state to forbid slavery and the first to adopt universal man-

hood suffrage (1777). Vermont has been a publican since 1854; only Georgia on Democratic side ties that record.

VIRGINIA

Capital: Richmond.

Governor: James Lindsay Almond, Jr., D. (to Jan. 1962).

Lieut. Governor: A. E. Stephens (to Jan. 1962).

Secy. of the Commonwealth: Martha Bell (to Jan. 1962) (way (apptd. by Governor)).

Comptroller: Sidney C. Day, Jr. (apptd. by Governor).

Atty. General: Albertis S. Harrison, Jr. (apptd. by Governor).

Entered Union & (rank): June 25, 1788 (13).

Seceded from Union: Apr. 17, 1861.

Re-entered Union: Jan. 27, 1870.

Present constitution adopted: 1902.

Motto: *Sic semper tyrannis* (Thus always to tyrants).

State flower: American dogwood (1918).

State bird: Cardinal.

State song: "Carry Me Back to Old Virginia" (1940).

Nicknames: The Old Dominion; Cavalier State.

Origin of name: In honor of Elizabeth, "the Virgin Queen" of England.

1940 population & (rank): 2,677,773 (19).

1950 population & (rank): 3,318,680 (15).

1959 estimated population: 3,992,000.

Area & (rank): 40,815 sq. mi. (36).

Geographic center: In Appomattox Co., 11 mi. S of E of Amherst.

Number of counties: 98, plus 32 independent cities.

Largest cities (1950 Census): Richmond (231,010); Norfolk (213,513); Roanoke (91,920);

Portsmouth (80,039); Alexandria (61,700).

State forests: 7 (47,338 ac.).

State parks: 8 (21,523 ac.).

State revenue (1959): \$563,773,995.

State expenditure (1959): \$591,372,109.

The history of America is closely tied to that of Virginia, particularly in the colonial period. Jamestown, founded in 1607, was the first permanent English settlement in North America, and slavery was introduced there in 1619. The surrenders ending both the American Revolution and the Civil War occurred in Virginia. The state is called the "Mother of Presidents" because 8 chief executives of the U. S. were born there.

Points of historic interest include Monticello, home of Thomas Jefferson; the restored Colonial capital of Williamsburg; the restored Colonial capital of the Confederacy and of Virginia; the restored Colonial capital of the Confederacy and of Virginia; the restored Colonial capital of the Confederacy and of Virginia.

Among Virginia's natural wonders are the famous Natural Bridge and the limestone caverns of the Shenandoah Valley. The most important natural resources are beds of bituminous coal, forest lands, oyster beds and commercial fisheries.

Manufacturing includes chemicals, textiles, lumber and wood products, foods, transportation equipment (including shipbuilding), apparel and furniture. Agricultural products

clude livestock, poultry, dairy goods, apples, grains and hay crops.

WASHINGTON

Olympia.

Governor: Albert D. Rosellini, Dem. (to Jan.

Governor: John A. Cherberg (to Jan.

State: Victor A. Meyers (to Jan. 1961).

Assurer: Tom Martin (to Jan. 1961).

General: John J. O'Connell (to Jan.

as territory: Mar. 2, 1853.

Union & (rank): Nov. 11, 1889 (42).

Constitution adopted: 1889.

-K1 (Indian word meaning Bye and

ver: Rhododendron (1949).

s: Hemlock (1947).

s: Goldfinch (1951).

ors: Green and gold (1925).

g: "Washington, My Home" (1959).

s: Evergreen State; Chinook State.

name: In honor of Geo. Washington.

ation & (rank): 1,736,191 (30).

ation & (rank): 2,378,963 (23).

ated population: 2,819,000.

rank): 66,786 sq. mi. (20).

c center: In Chelan Co., 10 mi. S of Wenatchee.

f counties: 39.

ties (1959 estimate): Seattle (581,300);

e (190,400); Tacoma (158,800);

a (45,100); Vancouver (40,800).

sts: 1,500,000 ac.

s: 67 (73,832 ac.).

ue, all funds (1959): \$680,687,000.

nditures, all funds (1959): \$641,982,-

gton is one of the leaders in production. Its rugged surface is rich of Douglas fir, hemlock, yellow and pine, spruce, larch and cedar. The other first is apples. Food and lumber, aircraft and missiles, and a wide other goods flow from Washington

Columbia River contains one third of potential water power of America. Grand Coulee, greatest power in the world. Other mighty dams on Columbia include Chief Joseph, and, Bonneville, McNary and The which are shared with Oregon. There dams in Washington, built for various purposes including power, irrigation, control, water storage, etc.

anford Engineer Works, north of has been set up as the world's first plant for atomic weapons material.

WEST VIRGINIA

Charleston.

Cecil H. Underwood, Rep. (to Jan.

ate: Joe F. Burdett (to Jan. 1961).

tor: L. McGuire (to Jan. 1961).

ral: W. W. Barron (to Jan. 1961).

ion & (rank): June 20, 1863 (35).

stitution adopted: 1872.

Motto: *Montani semper liberi* (Mountaineers always free).

State flower: Rhododendron (1903).

State tree: Sugar maple (1949).

State bird: Cardinal (1949).

State animal: Black bear.

State colors: Blue and gold (unofficial).

State songs: "West Virginia, My Home Sweet Home" (approved 1947 as one of songs of state); "West Virginia Hills" (by custom).

Nickname: Mountain State.

Origin of name: Same as for Virginia.

1940 population & (rank): 1,901,974 (25).

1950 population & (rank): 2,005,552 (29).

1959 estimated population: 1,965,000.

Area & (rank): 24,181 sq mi. (41).

Geographic center: In Braxton Co., 4 mi. E of Sutton.

Number of counties: 55.

Largest cities (1950 Census): Huntington (86,353); Charleston (73,501); Wheeling (58,891); Clarksburg (32,014); Parkersburg (29,684).

State forests: 9 (78,351 ac.).

State parks: 20 (40,974 ac.).

State general revenue (1957-58): \$104,654,805.

State general expenditure (1957-58): \$104,378,-674.

Mountainous West Virginia is the coal mining leader of the nation. The state also ranks high in steel, glass, aluminum and chemical manufacture, natural gas, oil, quarry products and hardwood lumber. Cattle is the main agricultural product. Leading crops include wheat, corn, oats, hay, tobacco and fruit.

West Virginia was created when its residents refused to secede from the Union and severed the state from Virginia during the Civil War era.

Like many mountain states, West Virginia has an equable climate without extremes. White Sulphur Springs, in Greenbrier County, is a famous health resort.

WISCONSIN

Capital: Madison.

Governor: Gaylord A. Nelson, Dem. (to Jan. 1961).

Lieut. Governor: Philleo Nash (to Jan. 1961).

Secy. of State: Robert C. Zimmerman (to Jan. 1961).

Dir. of Bureau of Finance: E. C. Giessel (indefinite).

Atty. General: John W. Reynolds (to Jan. 1961).

Organized as territory: Apr. 20, 1836.

Entered Union & (rank): May 29, 1848 (30).

Present constitution adopted: 1848.

Motto: Forward.

State flower: Violet.

State tree: Sugar maple.

State bird: Robin.

State animal: Badger; "wild life" animal: white-tailed deer.

State fish: Musky (Muskellunge).

State song: "On Wisconsin."

Nickname: Badger State.

Origin of name: French corruption of an Indian word meaning "gathering of waters."

1940 population & (rank): 3,137,587 (13).

1950 population & (rank): 3,434,575 (14).

1960 estimated population: 3,925,854.
 Area & (rank): 56,154 sq. mi. (26).
 Geographic center: In Wood Co., 9 mi. SE of Marshfield.
 Number of counties: 71.
 Largest cities (1950 Census): Milwaukee (637,392); Madison (96,056); Racine (71,193); Kenosha (54,368); Green Bay (52,735).
 State forests: 8 (364,800 ac.).
 State parks: 33 (19,395 ac.).
 State total net revenue, all funds (1958-59): \$653,948,261.
 State total net expenditure, all funds (1958-59): \$620,315,304.

Wisconsin leads the U. S. in milk and cheese production. In 1959, the state ranked first in the number of milk cows (2,501,000), and produced 14.4% of the nation's total output of milk. Other important farm products are: potatoes, cabbage, maple sugar, cranberries and cherries. The state ranks first in producing peas, corn and beets for canning.

About 40 years ago Wisconsin's forests became depleted, but in recent years phenomenal strides in reforestation have been made. The chief industrial products of the state are automobiles, machinery, furniture, paper, beer and processed foods.

Wisconsin pioneered in social legislation, providing pensions for the blind (1907), aid to dependent children (1913) and old-age assistance (1925). In 1932, it was the first state to enact an unemployment compensation law. In labor legislation, the state has also pioneered in important laws, among them the first workmen's compensation law actually to take effect. Wisconsin had the first state-wide primary-election law and the first successful income-tax law. Probably the greatest legislative innovation in 1959 was the creation of a streamlined form of county government for the Menominee Indian Reservation, which will become a separate county no longer under Federal supervision.

WYOMING

Capital: Cheyenne.
 Governor: J. J. "Joe" Hickey, Dem. (to Jan. 1963).
 Secy. of State: Jack R. Gage (to Jan. 1963).

Auditor: Minnie Mitchell (to Jan. 1963).
 Treasurer: C. J. Rogers (to Jan. 1963).
 Atty. General: Norman B. Gray (apptd. governor).
 Organized as territory: July 25, 1868.
 Entered Union & (rank): July 10, 1890 (44).
 Present constitution adopted: 1890.
 Motto: Equal rights (1955).
 State flower: Indian paintbrush (1917).
 State tree: Cottonwood (1947).
 State bird: Meadow lark (1927).
 State insignia: Bucking horse (unofficial).
 State song: "Wyoming" (1955).
 Special legal holiday: Arbor Day (by government designation).

Nickname: Equality State.
 Origin of name: From the Indian, meaning "mountains and valleys alternately named after the Wyoming Valley in Pa."
 1940 population & (rank): 250,742 (47).
 1950 population & (rank): 290,529 (47).
 1960 estimated population: 327,891.
 Area & (rank): 97,914 sq. mi. (9).
 Geographic center: In Fremont Co., 58 mi. E of Lander.
 Number of counties: 23, plus Yellowstone National Park.
 Largest cities (1950 Census): Cheyenne (19,935); Casper (23,673); Laramie (15,500); Sheridan (11,500); Rock Springs (10,850).
 State forests: None.
 State parks: 2 (1,060 ac.).
 Estimated income available (General Fund, 1961): \$33,743,892.
 Estimated expenditure (General Fund, 1960-61): \$32,643,438.

Wealthy in wool, cattle, oil, uranium, and coal, Wyoming was first in U. S. history to insure woman's place in politics. In 1890 it gave women the vote and Mrs. Nellie T. Loe Ross, who held office in 1925-27, was the first U. S. woman governor.

Second in mean elevation to Colorado, Wyoming has many lures for the tourist trade, notably Yellowstone National Park. Cheyenne is famous for its annual "Frontier Days" celebration, which brings in tourists from everywhere. One of the world's largest subbituminous coal fields lies near Gillette. Big game hunting is good in all parts of the state.

COMMONWEALTH OF PUERTO RICO

Capital: San Juan.
 Governor: Luis Muñoz Marín, Pop. Dem. (to Jan. 1961).
 Song: "La Borinqueña."
 1940 population: 1,869,255.
 1950 population: 2,210,703.
 1940-50 population change: +18.3%.
 1960 estimated population: 2,345,983.
 Area: 3,435 sq. mi.
 Largest cities (1960 Est.): San Juan (451,240*); Ponce (114,965); Mayagüez (50,808); Caguas (33,759)**; Arecibo (28,659)**.
 * Includes Río Piedras (132,438), which was annexed in 1951. ** 1950.

Puerto Rico is an island about 100 mi. long and 35 mi. wide at the northeastern

end of the Caribbean Sea. It is a self-governing Commonwealth freely and voluntarily associated with the U. S. Under its Constitution, a Governor and a Legislative Assembly are elected by direct vote for a 4-year period. The judiciary is vested in a Supreme Court and lower courts established by law. The people elect a Resident Commissioner to the U. S. House of Representatives, where he has a voice but no vote. The island was formerly an unincorporated territory of the U. S. after ceded by Spain as a result of the Spanish-American War.

The Commonwealth, established in 1900, is one of the most densely populated areas

, with about 683 inhabitants per le. However, it has one of the high- ards of living in Latin America. Puerto Rican economic develop- Operation Bootstrap. This program lished more than 600 new factories

and has greatly increased agricultural pro- duction, transportation and communications facilities, electric power, housing, and other industries.

Columbus discovered the island on his second voyage to America in 1493.

NON-SELF-GOVERNING U. S. TERRITORIES

AMERICAN SAMOA

ago Pago (on Tutuila Island).

Peter Tali Coleman.

ation: 12,908.

ation: 18,937.

ated population: 20,000.

g. mi.

h Samoa, a group of 5 volcanic d 2 coral atolls located some 2,400 h of Hawaii in the South Pacific an insular possession of the U. S. ed by the Department of the In-

Treaty of Berlin signed Dec. 2, 1899, d Feb. 16, 1900, the U. S. was in- lly acknowledged to have rights ver all the islands of the Samoa t of longitude 171° west of Green- Apr. 17, 1900, the chiefs of Tutuila u ceded those islands to the U. S. e King and chiefs of Manu'a ceded s of Ofu, Olosega and Tau (com- e Manu'a group) to the U. S. land, some 200 miles north of s included as part of the territory Congress Mar. 4, 1925; and on Feb. Congress formally accepted sover- r the entire group and placed the ity for administration in the hands sident. From 1900-51, by Presiden- ion, the Department of the Navy he territory. On July 1, 1951, ad- on was transferred to the Depart- he Interior. The islands' first con- vas signed on Apr. 27, 1960.

ncipal products are copra, mats, s and canned fish.

R, HOWLAND AND JARVIS

acific Islands were not to play a e extraterritorial plans of the e May 13, 1936, when the U. S. per- claim. President F. D. Roosevelt, e, placed them under the control isdiction by the Secretary of the r administration purposes.

and is a saucer-shaped atoll with r approximately one square mile vation of 20 feet. It is about 1,650 Hawaii.

Island, 36 miles to the northeast, hately one and a half miles long, mile wide and rises to an eleva- feet.

land is several hundred miles to and is approximately two miles e and an eighth miles wide.

owland, and Jarvis have been un- nce 1942.

CANAL ZONE

Headquarters: Balboa Heights, C. Z.; 21 West St., New York City; 425 Thirteenth St., N. W., Washington, D. C.

Governor-President: Maj. Gen. W. A. Carter.

1940 population: 51,827.

1950 population: 52,822.

1960 population: 41,684.

Area: 553 sq. mi.

The Canal Zone is a 50-mile strip between the Atlantic and Pacific Oceans which was granted to the U. S. in perpetuity by the Republic of Panamá by treaty in 1903 (rati- fied Feb. 26, 1904). It extends roughly 5 miles on either side of the center line of the Panama Canal.

The 1903 treaty empowered the U. S. to act as sovereign within the zone to the exclusion of the exercise of any such sovereign rights by the Republic.

In return for the perpetual sovereign grant, the U. S. guaranteed the independence of the Republic and agreed to pay \$10,000,000 to Panama upon ratification of the treaty and \$250,000 in gold annually, beginning 9 years after ratification. The annual payments were increased to \$430,000 after the U. S. went off the gold standard. The annuity was increased to \$1,930,000 by the 1955 treaty.

The history of the Canal goes back to 1534, when King Charles V of Spain ordered a survey made. In 1876 a concession to con- struct a Panama Canal was granted by Col- umbia to an American citizen, Anthony de Gogorza. A revised concession was granted in 1878 to St. Lucien N. B. Nise, who represented a French company. Construction of the wa- terway was formally inaugurated in Jan. 1880 by the French Canal Co. Twenty years later, the French gave up their efforts to build a canal and sold their canal rights and prop- erties to the U. S. for \$40,000,000, the transfer being made May 4, 1904, in Panama City. The construction was completed 10 years later.

The Canal is 40.27 miles from shore line to shore line and 50.72 miles from deep water in the Caribbean to deep water in the Pa- cific. The Panama Railroad, completed in 1855 by private U. S. enterprise, is owned by the Panama Canal Co. It roughly parallels the Canal channel, running 47.64 miles from Colon to Panama City and is the oldest transcontinental railroad in the Americas.

The Panama Canal Locks lift or lower ships 85 feet between sea level and Gatún Lake level in 3 steps on each side of the Isthmus. On the Atlantic side the three steps are at Gatún Locks. On the Pacific side there are two steps at Miraflores Locks and one step

at the Pedro Miguel Locks. Each of the twin chambers in every flight of locks has a usable length of 1,000 feet, a width of 110 feet, and a minimum depth of water of 40 feet.

The Canal Zone is, in effect, a U. S. government reservation, and in general no private enterprise is permitted except that relating directly to the operation of the waterway. The Governor, who is appointed by the U. S. President, administers the Canal Zone Government, which is charged with the civil government, including health, sanitation and protection of the Zone. The Governor is also ex officio President of the Panama Canal Company, which is a corporate agency of the U. S. charged with the operation of the Canal and related business activities.

CANTON AND ENDERBURY

Canton and Enderbury Islands, the largest of the Phoenix group, are jointly administered by the United States and Great Britain after an agreement signed on Apr. 6, 1939. Canton is triangular in shape and the largest of the eight islands of this group. It lies approximately 1,600 miles southwest of Hawaii in the Pacific and was discovered at the turn of the eighteenth century by U. S. whalers. It was surveyed by Commander R. W. Meade who named it after a whaler ship. It had, in 1959, a population of 318, including Europeans. Enderbury is rectangular in shape and is 3.5 miles long by 1.5 miles wide. It is unpopulated and lies about 32 miles southeast of Canton.

GUAM

Capital: Agaña.
Governor: Joseph Flores.
1940 population: 22,290.
1950 population: 59,498.
1960 estimated population: 66,000.
1959 area: 209 sq. mi.

Guam, the largest of the Mariana Islands, is independent of the trusteeship assigned to the U. S. in 1947. It was acquired by the U. S. from Spain in 1898 (occupied 1899) and was placed under the Navy Department.

In World War II, Guam was seized by the Japanese on Dec. 11, 1941; but on July 27, 1944, it was once more in U. S. hands.

On Aug. 1, 1950, President Truman signed a bill which granted U. S. citizenship to the people of Guam and established self-government. However, the people do not have an elected representative in Washington, D.C., and they do not vote in national elections. The civilian Governor operates under the Department of the Interior.

Added stimulus to Guam's economy was given by the development in 1950 of a commercial port at Apra Harbor.

JOHNSTON ISLAND

This island was originally discovered by Captain Charles James Johnston of H.M.S. *Cornwallis* on Dec. 14, 1807. On July 27, 1858, it was claimed by Hawaii and later became a possession of the U. S. The island is about 600 miles southwest of Hawaii and about $1\frac{1}{2}$ miles long by half a mile wide.

KINGMAN REEF

This reef was discovered by Captain W. Kingman in Nov. 1853 and is the smallest land of U. S. sovereignty. It is 150 feet long by 120 feet wide at high tide. At low tide, two other islets of this atoll appear. It is about 1,000 miles south of Hawaii.

MIDWAY

Midway, lying about 1,200 miles northwest of Hawaii, was discovered by Captain N. C. Brooks of the Hawaiian *Gambia* on July 5, 1859, in the name of the U. S. It was formally declared a U. S. possession in 1867, and in 1903 Theodore Roosevelt made it a naval reservation.

Sand and Eastern Islands, with 850 and 328 acres respectively, are its largest individual islands.

The total group comprises an area of 2.6 square miles and has no native population. The Navy Department maintains an air station and has jurisdiction over the island.

VIRGIN ISLANDS OF THE U. S.

Capital: Charlotte Amalie (on St. Thomas).
Governor: John David Merwin.
1940 population: 24,889.
1950 population: 26,665.
1940-50 population change: +7.1%.
1959 estimated population: 31,400 (St. Croix, 700; St. Thomas, 16,800; St. John, 900).
Area: 133 sq. mi. (St. Croix, 82; St. Thomas, 32; St. John, 19).

The Virgin Islands, consisting of 9 main islands and some 75 islets, were discovered by Columbus in 1493. Since 1666, England has held 6 of the main islands; the other 3 (St. Croix, St. Thomas and St. John) were well as about 50 of the islets, were eventually acquired by Denmark, which named them the Danish West Indies. In 1917, the islands were purchased by the U. S. from Denmark for \$25 million.

Congress granted U. S. citizenship to Virgin Islanders in 1927; and, in 1931, administration was transferred from the Navy to the Department of the Interior. Universal suffrage was given in 1936 to all persons who could read and write the English language. The Governor is appointed by the President of the U. S.

About 85% of the population is Negro. There is limited farming, fishing and raising. Vegetables, citrus fruits and coconuts are raised, and the chief items of export are sugar, rum and bay rum. Tourism is the principal industry.

WAKE ISLAND

Wake Island, about halfway between Hawaii and Guam, is actually the third largest of Wilkes, Peale and Wake. They were discovered by the British in 1796 and annexed by the U. S. in 1898. The entire area comprises four square miles. In 1938, Pan American Airways established a seaplane base. It has been used as a commercial base.

Dec. 8, 1941, it was attacked by the Japanese, who finally took possession on Jan. 1, 1945.

The Federal Aviation Agency maintains a station on the island and has jurisdiction, with the Navy, over the island. There is no native population.

U. S. Trusteeships

Germany assumed a protectorate over the Marshall Islands; and, in 1899, she took the Northern Mariana and Caroline Islands from Spain. These islands were taken by the Japanese in 1914 and were mandated to Japan by the League of Nations. On Apr. 2, 1947, the U. N. Security Council approved a trusteeship agreement with the U. S. under which the Northern Mariana, Caroline and Marshall Islands became U. S. Trust Territory under the administration of the U. S. The measure was approved by Congress, on July 18, 1947. Administration was transferred from the Navy to the Department of the Interior on July 1, 1951. However, administration of the Marshall Islands was transferred back to the Navy on Jan. 1, 1953. On July 17 of that year, administration of the remaining islands of the Northern Marianas, with the exception of Rota, was also transferred back to the Navy.

The group comprises more than 2,000 islands, but the total land area is only 687 square miles, many of the islands being only tiny coral reefs. The Micronesians are the main group, the inhabitants of the Northern Marianas being most advanced.

MARIANA ISLANDS

The Mariana Islands, east of the Philippines and south of Japan, include the islands of Guam, Rota, Saipan, Tinian, Agaña, Agaña and Agaña. Guam, which is independent of the trusteeship, has been acquired by the U. S. from Spain in 1898. (For information on Guam, see page.)

Crops are copra and fresh fruits and vegetables.

CAROLINE ISLANDS

The Caroline Islands, east of the Philippines and south of the Marianas, include the islands of Truk and Palau groups and the islands of Ponape and Kusaie, as well as several atolls.

The islands are composed chiefly of volcanic

coral rock, and their peaks rise 2,000 to 3,000 feet above sea level. Chief exports of the islands are copra, trochus and handicrafts.

MARSHALL ISLANDS

The Marshall Islands, east of the Carolines, are divided into two chains: the western or Ralik group, including the atolls of Jaluit, Kwajalein, Wotho, Bikini and Eniwetok; and the eastern or Ratak group, including the atolls of Mili, Majuro, Maloelap, Wotje and Likiep.

The islands are of the coral-reef type and rise only a few feet above sea level. The chief crop is coconuts; exports include copra, tortoise shell, mother-of-pearl, etc.

Bikini and Eniwetok have been the scene of several atom-bomb tests.

Islands Under Provisional U. S. Administration

In accordance with the Japanese peace treaty of Sept. 8, 1951, the U. S. may assign to it, as a Trust Territory, the following former Japanese islands: the Ryukyu Islands south of 29° latitude (including Okinawa); the Bonin Islands (including Chichi Jima); the Volcano Islands

(including Iwo Jima); Rosario Island; Parece Vela; and Marcus Island. It was also agreed in the treaty that, until such trusteeship is actually granted, the U. S. will administer the islands. As of Sept., 1959, no action had been taken by the U. S. toward bringing about this trusteeship.

THE LARGEST CITIES OF THE UNITED STATES

For more information on the UNITED STATES ALMANAC as a book of national scope and interest, see page 1. The emphasis on and identification with a single city or state, as has been characteristic of the ALMANAC heretofore. To obtain accurate and authoritative information we have gone to the source. We appreciate their co-operation. The tabular material listed here is the latest possible. For 1960 census figures, see table of contents.

AKRON, OHIO

Founded as city: 1865.
Mayor: Leo Berg (to Dec. 1961).
Population & (rank): 244,791 (38).
Population & (rank): 274,605 (39).
Population change: +12.2%.
Area: 55 sq. mi.
Elevation: 1,081 ft.
In NE part of state, on Little Cuyahoga River.

County: Seat of Summit Co.
Churches: 316 of all denominations in county.
City-owned parks: 73 (4,400 ac.).
Telephones (1960): 211,493.
Television sets (1959): 37,300.
Radio stations (1960): AM, 4; FM, 1.
Assessed valuation (1959): \$775,500,000.
City tax rate (1959): \$37.80 per \$1,000.
Bonded debt (1959): \$38,838,546.
Revenue (1960): \$27,019,814.
Expenditure (1960): \$26,100,623.

ATLANTA, GA.

Incorporated as city: 1847.
 Mayor: William B. Hartsfield (to Jan 1962).
 1940 population & (rank): 302,288 (28).
 1950 population & (rank): 331,314 (33).
 1960 estimated population: 486,936.
 1940-50 population change: +9.6%.
 1960 area: 128.0 sq. mi.
 Altitude: Highest, 1,050 ft.; lowest, 940.
 Location: In NW central part of state, near Chattahoochee River.
 Counties: In Fulton and De Kalb Cos.; seat of Fulton Co.
 Churches: For whites, more than 352; for Negroes, more than 270.
 City-owned parks and parkways: 150 (3,000 ac.).
 Telephones (1959): 386,538.
 Families with radios (1956): 220,400.
 Television sets (1956): 186,200.
 Radio stations: AM, 15; FM, 5.
 Television stations: 3.
 Assessed valuation (1960): 1,011,572,061.
 City tax rate (1960): \$29.25 per \$1,000.
 Bonded debt (1959): \$66,066,511.
 Revenue (1959): \$46,348,206.
 Expenditure (1959): \$45,484,251.

BALTIMORE, MD.

Incorporated as city: 1797.
 Mayor: J. Harold Grady (to May 1963).
 1940 population & (rank): 859,100 (7).
 1950 population & (rank): 949,708 (6).
 1940-50 population change: +10.5%.
 1960 area: Land, 78.7 sq. mi.; inland water, 6.9.
 Altitude: Highest, 490 ft.; lowest, sea level.
 Location: On Patapsco River, about 12 mi. from Chesapeake Bay.
 County: Independent city.
 Churches: Roman Catholic, 68; Jewish, 51; Protestant and others, 488.
 City-owned parks: 148 park areas and tracts (6,000 ac.).
 Telephone subscribers (Jan. 1, 1960): 248,559.
 Radio stations: AM, 11.; FM, 6.
 Television stations: 3.
 Assessed valuation (1960): \$3,493,146,648.
 City tax rate (1960): \$3.60 per \$100.
 Net bonded debt (Jan. 1, 1960): \$302,541,633.
 Current revenue (1959 budget): \$211,071,677.
 Current expenditure (1959 budget): \$193,932,460.

BIRMINGHAM, ALA.

Incorporated as city: 1871.
 Mayor: James W. Morgan (to Nov. 1961).
 1940 population & (rank): 267,583 (35).
 1950 population & (rank): 326,037 (34).
 1940-50 population change: +21.8%.
 1959 estimated population: 378,000.
 1959 land area: 68.76 sq. mi.
 Altitude: Highest, 1,052 ft.; lowest, 565.
 Location: In N central part of state.
 County: Seat of Jefferson Co.
 Churches: Protestant, 570; Roman Catholic, 28; Jewish, 3.
 City-owned parks: 65 (1,250 ac.).
 Telephones (1959): 232,580.
 Television sets (1959): 142,800.

Radio stations: AM, 12; FM, 4.
 Television stations: 5.
 Assessed valuation (1959): \$490,000,000.
 City tax rate (1957): \$36 per \$1,000.
 Net bonded debt (1959): \$26,646,532.
 Tax Revenue (1959): \$29,699,302.
 Expenditure (1959): \$30,754,299.

BOSTON, MASS.

Incorporated as city: 1822.
 Mayor: John F. Collins (to Jan. 1964).
 1940 population & (rank): 770,816 (9).
 1950 population & (rank): 801,444 (10).
 1940-50 population change: +4.0%.
 1956 area: Land, 47.8 sq. mi.; inland water, 19.8.
 Altitude: Highest, 330 ft.; lowest, sea level.
 Location: On Massachusetts Bay, at mouth of Charles and Mystic Rivers.
 County: Seat of Suffolk Co.
 Churches: Protestant, 253; Roman Catholic, 84; Jewish, 38; others, 74.
 City-owned parks & parkways: 2,710.82 ac.
 Telephones: 409,000.
 Radio sets (Greater Boston Area): 2,328,293.
 Television sets (Greater Boston Area): 906,803.
 Radio stations: AM, 9; FM, 8.
 Television stations: 4.
 Assessed valuation (1959): \$1,462,569,000.
 City tax rate (1959): \$101.20 per \$1,000.
 Net bonded debt (1959): \$103,413,776.
 Revenue (1959): \$323,453,669.
 Expenditure (1959): \$317,377,632.

BUFFALO, N. Y.

Incorporated as city: 1832.
 Mayor: Frank A. Sedita (to Dec. 31, 1963).
 1940 population & (rank): 575,901 (14).
 1950 population & (rank): 580,132 (15).
 1940-50 population change: +0.7%.
 1940 area: Land, 42.67 sq. mi.; inland water, 10.8.
 Altitude: Highest, 680 ft.; lowest, 571.
 Location: At east end of Lake Erie, on Niagara River.
 County: Seat of Erie Co.
 Churches: Protestant, 290; Roman Catholic, 74; Jewish, 12; others, 30.
 City-owned parks: 10 public parks (3,000 ac.).
 Telephones (Jan. 1960): 358,006.
 Radio sets: 350,000.
 Television sets: 160,000.
 Radio stations: AM, 8; FM, 6.
 Television stations: 3.
 Assessed valuation (1959-60): \$1,075,437,566.
 City tax rate (1959-60): \$42.007 per \$1,000.
 Net bonded debt (1959): \$64,586,983.
 Revenue (1958-59): \$56,371,790.
 Expenditure (1958-59): \$41,683,433.

CHICAGO, ILL.

Incorporated as city: 1837.
 Mayor: Richard J. Daley (to Apr. 1963).
 1940 population & (rank): 3,396,808 (2).
 1950 population & (rank): 3,620,962 (2).
 1940-50 population change: +6.6%.
 1960 area: Land, 224.19 sq. mi.; inland water, 5.37.
 Altitude: Highest, 672 ft.; lowest, 581.

On lower west shore of Lake Michi-

eat of Cook Co.

Protestant, 1,421; Roman Catholic, 54.*

Parks: 212 (includes playgrounds).

(Feb. 1960): 1,906,705.

(Jan. 1960): 1,549,000.†

sets (Jan. 1960): 1,488,570.†

ons: AM, 16; FM, 13.

stations: 5.

valuation (1958): \$9,798,677,688.

te (1958): \$4.230 (north of 87th St.);

south of 87th St.). Both per \$100.

ed debt (1959): \$237,813,000.

1958): \$574,780,396.

e (1958): \$453,561,628.

nt churches excluded. † Metropolitan area.

CINCINNATI, OHIO

nd as city: 1819.

onald D. Clancy (to Nov. 1961).

er: C. A. Harrell (Apptd. 1954).

ation & (rank): 455,610 (17).

ation & (rank): 503,998 (18).

ulation change: +10.6%.

area: 77.3181 sq. mi.

ighest, 960 ft.; lowest, 441.

n SW corner of state on Ohio River.

at of Hamilton Co.

73.

parks: 82 (3,886 ac.).

(1959): 568,117.

radios (1958): 256,300.*

television (1959): 257,500.*

ons: AM, 8; FM, 3 (Greater Cin-

stations: 4.

valuation (1959): \$1,534,968,620.

e (1960): \$11.20 per \$1,000.

t (1959): \$174,311,650.

1959): \$62,719,254.

1959): \$57,693,808.

Hamilton County.

CLEVELAND, OHIO

nd as city: 1836.

thony J. Celebrezze (to Nov. 1961).

ation & (rank): 878,336 (6).

ation & (rank): 914,808 (7).

ulation change: +4.2%.

ation estimate: 871,415.

73.1 sq. mi.

ighest, 865 ft.; lowest, 573.

On Lake Erie at mouth of Cuya-

ver.

at of Cuyahoga Co.

Protestant, 377; Roman Catholic,

ish, 36; others, 6.

parks: 35 (2,420 ac.).

(1960): 855,621.*

(1960): 1,291,750.

ets (1960): 1,310,000.

ns: AM, 8; FM, 8.

tations: 3.

valuation (1960): \$2,852,260,000.

e (1960): \$36 per \$1,000.

t (1959): \$215,564,000.

1959): \$142,651,894.

(1959): \$111,967,545.

tan area. † Greater Cleveland. ‡ In

COLUMBUS, OHIO

Incorporated as city: 1834.

Mayor: W. Ralston Westlake (to Jan. 1964).

1940 population & (rank): 306,087 (26).

1950 population & (rank): 375,901 (28).

1940-50 population change: +22.8%.

1960 estimated population: 505,409.

Altitude: Highest, 902 ft.; lowest, 702.

Location: In central part of state, on Scioto River.

County: Seat of Franklin Co.

Churches: Protestant, 400; Roman Catholic, 40; Jewish, 5.

City-owned parks: 57 (2,772.81 ac.).

Telephones (Dec. 1959): 335,108.

Homes with radios (1958): 196,000.

Television sets (1958): 165,600.*

Radio stations: AM, 6; FM, 1.

Television stations: 3.

Assessed valuation (1959): \$1,110,730,700.

City tax rate (1958): \$27.40 per \$1,000.

Bonded debt (1960): \$80,314,638.

Revenue (1959): \$41,050,337.

Expenditure (1959): \$29,041,388.

* Metropolitan area.

DALLAS, TEX.

Incorporated as city: 1856.

Mayor: R. L. Thornton (to May 1961).

City Manager: Elgin E. Crull (apptd. 1952).

1940 population & (rank): 294,734 (31).

1950 population & (rank): 434,462 (22).

1940-50 population change: +47.4%.

1960 estimated population: 706,600.

1959 area: 277 sq. mi.

Altitude: Highest, 685 ft.; lowest, 375.

Location: In NE part of state, on Trinity River.

County: Seat of Dallas Co.

Churches: 800.

City-owned parks: 118 (7,988 ac.).

Telephones (Jan. 1, 1960): 422,640.

Radio sets (1960): 427,600.

Television homes (1960): 203,670.

Radio stations: AM, 10; FM, 3.

Television stations: 2.

Assessed valuation (1960): \$2,320,000,000.

Net bonded debt (Sept. 30, 1959): \$108,625,000.

Revenue (1960-61): \$73,852,078.

Expenditure (1960-61): \$73,852,078.

DAYTON, OHIO

Incorporated as city: 1805.

Mayor: R. William Patterson (to Jan. 1962).

City Manager: Herbert W. Starick (apptd. July 1953).

1940 population & (rank): 210,718 (40).

1950 population & (rank): 243,872 (44).

1940-50 population change: +15.7%.

1959 estimated population: 300,000.

1959 land area: 34.7 sq. mi.

Altitude: Highest 981 ft.; lowest, 727.

Location: In SW part of state, on Miami River.

County: Seat of Montgomery Co.

Churches: Protestant, 300; Roman Catholic, 29; Jewish, 3.

City-owned parks: 56 (1,550 ac.).

Telephones (1959): 240,955.

Radio sets (1959): 233,726.*

* Dwellings only; Metropolitan area. Dayton also has a ¼% City Income Tax on salaries and net profits of business.

Television sets (1959): 226,498.
 Radio stations (1958): AM, 4; FM, 1.
 Television stations (1958): 2.
 Assessed valuation (1959): \$315,406,500.
 City tax rate (1958): \$10 per \$1,000.†
 Bonded debt (1959): \$38,116,500.
 Revenue (1959 General Fund): \$11,809,497.
 Expenditure (1959 General Fund): \$11,603,989.

DENVER, COLO.

Incorporated as city: 1861.
 Mayor: Richard Y. Batterton (to July 1963).
 1940 population & (rank): 322,412 (24).
 1950 population & (rank): 415,786 (24).
 1940-50 population change: +29.0%.
 1959 area: Land, 73.8 sq. mi.; inland water, .85.
 Altitude: Highest, 5,470 ft.; lowest, 5,130.
 Location: In NE central part of state, on South Platte River.
 County: Coextensive with Denver Co.
 Churches: Protestant, 360; Roman Catholic, 53; Jewish, 14.
 City-owned parks: 100 (1,981 developed acres).
 City-owned mountain parks: 40 (13,447.6 ac.).
 Families with telephones (1959): 214,618.
 Radio stations: AM, 11; FM, 3.
 Television stations: 5.
 Assessed valuation (1959): \$1,098,188,720.
 City tax rate (1959): \$20.90 per \$1,000.
 Bonded debt (1959): \$17,842,930.
 Revenue (1959): \$83,632,055.
 Expenditure (1959): \$72,556,360.

DETROIT, MICH.

Incorporated as city: 1806.
 Mayor: Louis C. Miriani (to Jan. 1962).
 1940 population & (rank): 1,623,452 (4).
 1950 population & (rank): 1,849,568 (5).
 1940-50 population change: +13.9%.
 1957 area: Land, 139.6 sq. mi.; inland water, 4.1.
 Altitude: Highest, 685 ft.; lowest, 574.
 Location: In Southeast part of state, on Detroit River.
 County: Seat of Wayne Co.
 Churches: * Protestant, 1,510; Catholic, 317; Jewish, 48.
 City-owned parks: 359 sites (5,841 ac.).
 Telephones: 1,531,464.*
 Radio sets: 1,072,000.
 Television sets: 1,039,120.
 Radio stations: AM, 12; FM, 17.*
 Television stations: 4.*
 Assessed valuation (1959): \$5,371,956,843.
 City tax rate (1959-60): \$25.258 per \$1,000.†
 Net bonded debt (June 30, 1959): \$378,928,738.
 Revenue (1958-59): \$247,449,872.
 Expenditure (1958-59): \$235,597,087.

* Metropolitan area. † Excludes school system.

FORT WORTH, TEX.

Incorporated as city: 1873.
 Mayor: Thomas A. McCann (to April 1961).
 City Manager: L. P. Cookingham (apptd. 1959).
 1940 population & (rank): 177,662 (46).
 1950 population & (rank): 278,778 (38).
 1940-50 population change: +56.9%.
 1959 estimated population: 399,000.
 1959 estimated metropolitan population: 582,000.
 1959 area: 147.68 sq. mi.
 Altitude: Highest, 780 ft.; lowest, 520.
 Location: In N Central part of state, on Trinity River.

County: Seat of Tarrant Co.
 Churches: Protestant, 574; Roman Catholic, 18; Jewish, 2.
 City-owned parks: 65 (4,957 ac.).
 Telephones (1960): 230,335.
 Radio sets (1959): 250,000.
 Television sets (1959): 200,000.
 Radio stations (1959): AM, 6; FM, 2.
 Television stations (1959): 7.
 Assessed valuation (1959): \$773,712,990.
 City tax rate (1959): \$1.71 per \$100.
 Bonded debt (1959): \$84,305,000.
 Revenue (1959): \$19,569,274.
 Expenditure (1959): \$19,805,542.

HONOLULU, HAWAII

Incorporated as city & county: 1909.
 Mayor: Neal S. Blaisdell (to Jan. 2, 1961).
 1940 population of city: 179,326.
 1940 population of city & county: 257,664.
 1950 population of city: 248,034.
 1950 population of city & county: 353,020.
 1959 estimated population of city & county: 525,777.
 1959 area of city & county: 604 sq. mi.
 Altitude: Highest, 4,025 ft.; lowest, sea level.
 Location: County comprises entire island of Oahu; city is on southeast part of island.
 Churches: Roman Catholic, 27; Buddhist, 1; Jewish, 1; Protestant & other, 146.
 City-owned parks: 2,721.28 ac.
 Telephones (1960): 200,000.
 Television sets (1960): 107,069.
 Radio stations: AM, 11; FM, 1.
 Television stations: 3.
 Assessed valuation (1960): \$1,527,489,601.
 City tax rate (1960): \$11.70 per \$1,000.
 Bonded debt (1960): \$65,033,000.
 Revenue (1959): \$37,867,701 (plus 1958 surplus of \$707,660).
 Expenditure (1959): \$35,290,062.

HOUSTON, TEX.

Incorporated as city: 1837.
 Mayor: Lewis Cutrer (to Jan. 1962).
 1940 population & (rank): 384,514 (21).
 1950 population & (rank): 596,163 (14).
 1940-50 population change: +55.0%.
 1960 estimated population: 932,680.
 1960 land area: 353 sq. mi.
 Altitude: Highest, 54 ft.; lowest, sea level.
 Location: In SE part of state, near Gulf of Mexico.
 County: Seat of Harris Co.
 Churches: Approximately 1,275.*
 City-owned parks: 131 (4,500 ac.).
 Telephones: (1960): 510,000.*
 Radio sets (1960): 1,690,800.*
 Television sets (1960): 470,672.*
 Radio stations (1960): AM, 9; FM, 6.
 Television stations (1960): 4.
 Assessed valuation (1959): \$2,199,662,850.
 City tax rate (1960): \$2 per 100.
 Bonded debt (Jan. 1960): \$235,606,000.
 Revenue (1959 General Fund): \$56,912,504.
 Expenditure (1959 General Fund): \$59,578,500.

* Metropolitan area (Harris County).

INDIANAPOLIS, IND.

Incorporated as city: 1874.
 Mayor: Charles H. Boswell (to Dec. 1963).

ulation & (rank): 386,972 (20).
 ulation & (rank): 427,173 (23).
 population change: +10.4%.
 mated population: 470,464.
 mated metropolitan population: 690,212.
 a: Land, 68.0 sq. mi.; inland water,

Highest, 816 ft.; lowest, 667.
 In central part of state, on West
 of White River.

Seat of Marion County.

: 515.

nd parks: 32 (3,519 ac.).

s (Dec. 1958): 322,337.

s: 180,516 (radio families).

sets: 165,800.

tions: AM, 6; FM, 2.

stations: 3.

valuation (1959): \$792,307,130.

ate (1960): \$7.719 per \$100.

t (Dec. 31, 1956): \$48,643,050.

(1959): \$29,087,285.*

re (1959): \$27,592,661.*

es schools and county and township govern-

JACKSONVILLE, FLA.

ed as city: 1832.

aydon Burns (to June 1963).

lation & (rank): 173,065 (47).

lation & (rank): 204,517 (49).

population change: +18.2%.

area: 30.2 sq. mi.

Highest, 25 ft.; lowest, 10 ft.

In NE part of state, on St. Johns

near Atlantic Ocean.

Seat of Duval Co.

300.

nd parks: 1,200 ac.

s (1960): 194,237.

tions (1955): AM, 7; FM, 2.

stations (1955): 2.

valuation (1959): \$353,273,280.

ate (1960): \$19.40 per \$1,000.

bt (1959): \$2,321,000.

(1959): \$24,618,949.

re (1959): \$23,978,780.

JERSEY CITY, N. J.

ed as city: 1855.

Charles S. Witkowski (to May 1961).

lation & (rank): 301,173 (30).

ation & (rank): 299,017 (37).

population change: -0.7%.

Land, 14.3 sq. mi.; inland water, 7.2.

Highest, 180 ft.; lowest, sea level.

In NE part of state, on Hudson

nd Upper New York Bay.

Seat of Hudson Co.

Protestant, 96; Roman Catholic, 39;

17; Others, 45.

(1960): 111,000.

valuation (1960): \$494,017,628.

ate (1960): \$98.23 per \$1,000.

bt (Dec. 31, 1959): \$34,460,090.

(1959): \$55,196,210.

es (1959): \$57,906,653.

bonds and notes authorized and not issued

0.

KANSAS CITY, MO.

ed as city: 1850.

Roe Bartle (to Apr. 1963).

er: Harry M. Fleming.

ation & (rank): 399,178 (19).

1950 population & (rank): 456,622 (20).

1940-50 population change: +14.4%.

1959 land area: 129.83 sq. mi.

Altitude: Highest, 1,014 ft.; lowest, 722 ft.

Location: In western part of state, at con-

junction of Missouri and Kansas Rivers.

County: Located in Jackson & Clay Counties.

Churches: Protestant, 500; Roman Catholic,

45; Jewish, 4.

City-owned parks: 59 (3,245 ac.).

Telephones in Kansas City District Exchange

(Mar. 31, 1960): 485,302.

Television households (est. Jan. 1959): Jackson

County, 199,200; Clay County, 18,080.*

Radio stations (1960): AM, 9; FM, 5.

Television stations (1960): 3.

Assessed valuation (1960): \$963,900,000.

City tax rate (1960-61): \$15 per \$1,000.

Bonded debt (Apr. 30, 1960): \$64,264,000.

Revenue (1959-60): \$33,212,178.

Expenditure (1959-60): \$33,826,160.

* Includes county area not encompassed by city limits
 of Kansas City, Mo.

LONG BEACH, CALIF.

Founded: 1881.

Mayor: Edwin W. Wade (to July 1963).

City Manager: Samuel E. Vickers (apptd.
 1949).

1940 population & (rank): 164,271 (53).

1950 population & (rank): 250,767 (41).

1940-50 population change: +52.7%.

1960 estimated population: 324,822.

1960 land area: 46.46 sq. mi.

Altitude: Highest, 170 ft.; lowest, sea level.

Location: On San Pedro Bay, south of Los
 Angeles.

County: In Los Angeles Co.

Churches: 184.

City-owned parks: 37 (1,725.86 ac.).

Telephones (1960): 190,630.

Radio stations (1957): AM, 2; FM, 3.

Television stations: None.

Assessed valuation (1959-60): \$684,496,510.

City tax rate (1960-61): \$1.37 per \$100.

Bonded debt (June 30, 1960): \$36,598,802.

Revenue (1959-60): \$65,178,078.

Expenditure (1959-60): \$71,228,065.

LOS ANGELES, CALIF.

Incorporated as city: 1850.

Mayor: Norris Poulson (to June 1961).

1940 population & (rank): 1,504,277 (5).

1950 population & (rank): 1,970,358 (4).

1940-50 population change: +31.0%.

1956 population (Special U. S. Census): 2,243,-
 901.

1960 area: 457.93 sq. mi.

Altitude: Highest, 5,081 ft.; lowest, sea level.

Location: In SW part of state, on Pacific
 Ocean.

County: Seat of Los Angeles Co.

Churches: 1,571 Catholic, Protestant and
 Jewish, plus unknown number of others.

City-owned parks: 112 (10,254 ac.).

Telephones (1960): 1,582,000.

Radio sets in homes (1960): 1,935,000.

Television sets in homes (1960): 706,000.

Radio stations (1960): AM, 30; FM, 24 (in-
 cludes 16 combinations).†

† Metropolitan area.

Television stations (1959): 7.
 Assessed valuation (1959-60): \$4,355,171,510.
 City tax rate (1959-60): \$1.9574 per \$100.
 Gross debt (June 30, 1959): General obligation bonds, \$246,369,000; revenue bonds, \$403,595,000.
 Revenue (cash receipts, 1958-59): \$540,947,722 (includes bonds sold).
 Expenditure (1958-59): \$514,236,137. capital expenditures).

LOUISVILLE, KY.

Incorporated as city: 1828.
 Mayor: Bruce Hoblitzell (to Dec. 1961).
 1950 population & (rank): 369,129 (30).
 1940-50 population change: +15.7%.
 1960 land area: 57.07 sq. mi.
 Altitude: Highest, 761 ft.; lowest, 382 ft.
 Location: In north central part of state, on Ohio River.
 County: Seat of Jefferson Co.
 Churches*: 648.
 City-owned parks: 8 parks; 57 playgrounds (total: 3,600 ac.).
 Telephones (1960)*: 239,420.
 Radio sets (1960)†: 126,660.
 Television sets (1960)*: 195,150.
 Radio stations (1960): AM, 7; FM, 0.
 Television stations (1955): 2.
 Assessed valuation (Jan. 1, 1958): \$742,381,008.
 City tax rate (1959): \$1.50 per \$100 (city purposes only; exclusive of schools).
 Net bonded debt (Dec. 31, 1959): \$51,662,484.
 Revenue (1959): \$18,773,790 (general corporate purposes only).
 Expenditure (1959): \$19,248,546 (general corporate purposes only).
 *Jefferson County. †Metropolitan area.

MEMPHIS, TENN.

Incorporated as city: 1826.
 Mayor: Henry Loeb (to Jan. 1964).
 1940 population & (rank): 292,942 (32).
 1950 population & (rank): 396,000 (26).
 1940-50 population change: +35.2%.
 1960 population: 496,522.
 1960 land area: 140.68 sq. mi.
 Altitude: Highest, 320 ft.; lowest, 195.
 Location: In SW corner of state, on Mississippi River.
 County: Seat of Shelby Co.
 Churches: Roman Catholic, 23; Jewish 7; Protestant & other, 626.
 City-owned parks: 110 (3,213 ac.); playgrounds, 48.
 Telephones (Dec. 31, 1959): 228,473.
 Radio sets (Apr. 1, 1958): 158,600.
 Television sets (Mar. 1, 1958): 140,100.
 Radio stations: AM, 9; FM, 3.
 Television stations: 4.
 Assessed valuation (1960): \$1,109,116,421.
 City tax rate (1953): \$1.80 per \$100.
 Bonded debt (Jan. 2, 1960): \$78,034,960.
 Revenue (1959): \$26,851,715.
 Expenditure (1959): \$26,512,260.

MIAMI, FLA.

Incorporated as city: 1896.
 Mayor: Robert King High (to Nov. 1961).

City manager: Melvin L. Reese (apptd. 1960).
 1940 population & (rank): 172,172 (48).
 1950 population & (rank): 249,276 (42).
 1940-50 population change: +44.8%.
 1959 estimated population: 335,000.
 1959 area: Land, 34.32 sq. mi.; inland water, 19.50.
 Altitude: Average, 12 ft.
 Location: In SE part of state, on Biscayne Bay.
 County: Seat of Dade Co.
 Churches: Metropolitan Miami (Diocese of Miami County), 581.
 City-owned parks: 52.
 Telephones (1959): 464,738.
 Families with radio sets (1959): 900,000.
 Families with television sets (1959): 256,202.
 Radio stations: AM, 12; FM, 6 (4 AM-FM).
 Television stations: 3 commercial, 1 educational.
 Gross assessed valuation (1959): \$1,073,853,000.
 City tax rate (1959-60): \$20.69 per \$1,000.
 Net bonded debt (June 30, 1959): \$37,156,081.
 Revenue (1958-59): \$28,945,984.
 Expenditure (1958-59): \$28,322,550.

MILWAUKEE, WIS.

Incorporated as city: 1846.
 Mayor: Henry W. Maier (to Apr. 1964).
 1940 population & (rank): 587,472 (13).
 1950 population & (rank): 637,392 (13).
 1940-50 population change: +8.5%.
 1960 land area: 91.10 sq. mi.
 Altitude: 581.22 ft.
 Location: In SE part of state, on Lake Michigan.
 County: Seat of Milwaukee Co.
 Churches: 571 in county.
 County-owned parks: 96 (8,783.11 ac.).
 Telephones (1957): 453,767.
 Families with radio sets (1959): 310,720.*
 Families with television sets (1960): 303,700.*
 Radio stations: AM, 7; FM, 4.
 Television stations: 5.
 Assessed valuation (1960): \$1,922,395,960.
 City-school tax rate (1959): \$41.11 per \$1,000.
 Gross debt (Dec. 31, 1958): \$100,157,000.
 Revenue (1958): \$132,119,205.
 Expenditure (1960 budget): \$142,554,153.
 *Milwaukee County.

MINNEAPOLIS, MINN.

Incorporated as city: 1867.
 Mayor: P. Kenneth Peterson (to July 1964).
 1940 population & (rank): 492,370 (16).
 1950 population & (rank): 521,718 (17).
 1940-50 population change: +6.0%.
 1954 area: Land, 58.79 sq. mi.; inland water, 5.0.
 Altitude: Highest, 945 ft.; lowest, 695.
 Location: In SE central part of state, on Mississippi River.
 County: Seat of Hennepin Co.
 Churches: 472.
 City-owned parks: 152.
 Telephones (1958): 307,555.
 Radio sets (1952): 410,000.
 Television sets (1955): 180,000.
 Radio stations: AM, 10; FM, 3.
 Television stations: 5.

valuation (1960): \$392,858,302.
 ate (1958): \$1.8708 per \$100.
 (1960): \$41,571,457.
 (1958): \$89,238,589.
 re (1958): \$89,238,589.

NEW ORLEANS, LA.

ted as city: 1805.
 e Lesseps S. Morrison (to May 1962).
 lation & (rank): 494,537 (15).
 lation & (rank): 570,445 (16).
 opulation change: +15.3%.
 ated population: 622,999.
 : Land, 199.4 sq. mi.; inland water,
 Highest, 15 ft.; lowest, 4 below sea

In SE part of state, between Missis-
 siver and Lake Pontchartrain.
 eat of Orleans Parish.
 625.

d parks: 69 (1,700 ac.).
 s (1959): 335,725.
 (1959): 222,000.
 sets (1959): 197,000.
 ions: AM, 10; FM, 4.
 stations: 4.
 valuation (1960): \$987,000,000.
 ate (1960): \$3.1275 per \$100.
 bt (Jan. 1, 1960): \$90,245,000.
 (1960 operating budget): \$33,076,640.
 e (1960 operating budget): \$33,076,640.

NEW YORK, N. Y.

as "Greater New York": 1898.
 bbert F. Wagner (to Dec. 1961).
 Presidents: Bronx, James J. Lyons;
 n, John Cashmore; Manhattan,
 E. Jack; Queens, John P. Clancy;
 nd, Albert V. Maniscalco.
 lation & (rank): 7,454,995 (1).
 ation & (rank): 7,891,957 (1).
 opulation change: +5.9%.
 319.1 sq. mi.

Highest, 409 ft.; lowest, set level.
 Consists of 5 counties: Bronx, Kings
 yn, New York (Manhattan),
 Richmond (Staten Island).
 SE part of state, at mouth of Hud-
 er.
 Protestant, 1,607; Jewish, 1,245;
 Catholic, 442.
 parks: 1,293 (35,464 ac.).
 : 4,411,604.
 ith radios: 2,407,700.
 ith television sets: 2,286,600.
 ns: AM & FM, 9; AM only, 9; FM

stations: 6.
 valuation (1960-61): \$24,944,418,337.
 te (1960-61): \$4.12 per \$100.
 bt (June 30, 1960): \$3,362,921,088.
 1958-59): \$2,063,065,674.
 e (1959-60 budget): \$2,174,946,957.

NEWARK, N. J.

d as city: 1836.
 o P. Carlin (to July 1962).
 ation & (rank): 429,760 (18).
 ation & (rank): 438,776 (21).
 opulation change: +2.1%.

1955 area: Land, 23.57 sq. mi.; inland wa-
 ter, 3.2.
 Altitude: Highest, 273.4 ft.; lowest, sea level.
 Location: In NE part of state, on Passaic River
 and Newark Bay.
 County: Seat of Essex Co.
 Churches: Protestant, 159; Roman Catholic,
 41; Jewish, 32; others, 62.
 City-owned parks: 38 (34.24 ac.).
 County-governed parks in city: 7 (755.72 ac.).
 Telephones (1959): 295,000.
 Radio stations: AM, 4; FM, 3.
 Television stations: 1.
 Assessed valuation (1960): \$726,125,429.
 City tax rate (1960): \$10.20 per \$100.
 Net bonded debt (1959): \$32,803,000.
 Revenue (1959): \$94,043,677.
 Expenditure (1959): \$94,043,677.

NORFOLK, VA.

Incorporated as city: 1845.
 Mayor: W. F. Duckworth (to Aug. 31, 1962).
 City Manager: Thomas F. Maxwell (apptd.
 Feb. 1956).
 1940 population & (rank): 144,332 (60).
 1950 population & (rank): 213,513 (48).
 1940-50 population change: +47.9%.
 1959 estimated population: 330,323.
 1959 land area: 61.84 sq. mi.
 Location: In SE part of state, on Elizabeth
 River and Hampton Roads.
 County: Independent city.
 Churches: 375.
 Telephones (1959): 122,677.
 Radio stations (1957): AM, 6; FM, 3.
 Television stations (1958): 3.
 Assessed valuation (1959): \$440,743,740.
 City tax rate (1958): Real and personal, \$3 per
 \$100; machinery, \$1 per \$100.
 Bonded debt (1959): \$55,905,360.
 Revenue (1960 anticipated): \$36,887,440.*
 Expenditure (1960 budget): \$36,887,440.

* Does not include cash surplus.

OAKLAND, CALIF.

Incorporated as city: 1854.
 Mayor: Clifford E. Rishell (to June 1961).
 City Manager: Wayne E. Thompson (appt.
 Aug. 1954).
 1940 population & (rank): 302,163 (29).
 1950 population & (rank): 384,575 (27).
 1940-50 population change: +27.3%.
 1960 estimated population: 361,082.
 1959 land area: 53.1 sq. mi.
 Altitude: Highest, 1,700 ft.; lowest, sea level.
 Location: In west central part of state, on
 east side of San Francisco Bay.
 County: Seat of Alameda Co.
 Churches: Protestant, 149; Roman Catholic, 21;
 Jewish, 3; others, 46.
 City-owned parks: 943.6 ac.
 Telephones (1960): 374,271.*
 Radio sets (est. 1960): 845,200.†
 Television sets (est. 1960): 276,100.†
 Radio stations (1960): AM, 4; FM, 4.
 Television stations (1960): 5 (Bay area).
 Assessed valuation (1959-60): \$616,934,254.
 City tax rate (1959-60): \$2.91 per \$100.
 Bonded debt (June 30, 1959): \$18,087,000.
 Revenue (1958-59, all funds): \$35,681,483.
 Expenditure (1958-59, all funds): \$35,966,646.

* Oakland directory area. † Metropolitan area.

OKLAHOMA CITY, OKLA.

Incorporated as city: 1890.
 Mayor: James Norick (to Apr. 1963).
 City Manager: Sheldon L. Stirling.
 1940 population & (rank): 204,424 (42).
 1950 population & (rank): 243,504 (45).
 1940-50 population change: +19.1%.
 1960 land area: 360 sq. mi.
 Altitude: Highest, 1,276 ft.; lowest, 1,070.
 Location: In central part of state, on North Canadian River.
 County: Seat of Oklahoma Co.
 Churches: Protestant & others, 340; Catholic, 15; Jewish, 2.
 City-owned parks: 82 (9,924 ac.).
 Telephones (1960): 204,059.
 Television sets: Not available.
 Radio stations: AM, 8; FM, 2.
 Television stations: 4.
 Assessed valuation (1959): Gross, \$327,410,129; net, \$271,553,029.
 City tax rate (1959): \$21.71 per \$1,000.
 Bonded debt (1959): \$63,950,500.
 Revenue (1959): \$12,015,805.
 Expenditure (1959): \$11,468,210.

OMAHA, NEBR.

Incorporated as city: 1857.
 Mayor: John Rosenblatt (to May 1961).
 1950 population & (rank): 251,117 (40).
 1940-50 population change: +12.2%.
 1960 estimated population: 309,000.
 1960 land area: 53.6 sq. mi.
 Altitude: Highest, 1,270 ft.
 Location: In eastern part of state, on Missouri River.
 County: Seat of Douglas Co.
 Churches: Protestant, 200; Roman Catholic, 37; Jewish, 3.
 City-owned parks: 3,400 ac.
 Telephones (1960): 182,500.
 Radio sets: 343,600.
 Television sets: 97,000.
 Radio stations (1960): AM, 7; FM, 3.
 Television stations (1960): 3.
 Assessed valuation (1960): \$504,348,981.
 City tax rate (1960): \$17.90 per \$1,000.
 Bonded debt (Jan. 1, 1960): \$11,391,000.
 Revenue (1959): \$18,834,375.*
 Expenditure (1959): \$16,635,078.

* Balance of revenue on hand on Dec. 31, 1959; \$8,804,171.

PHILADELPHIA, PA.

First charter as city: 1701.
 Mayor: Richardson Dilworth (to Jan. 1964).
 1940 population & (rank): 1,931,334 (3).
 1950 population & (rank): 2,071,605 (3).
 1940-50 population change: +7.3%.
 1960 land area: 129.71 sq. mi.
 Altitude: Highest, 440 ft.; lowest, sea level.
 Location: In SE part of state, at junction of Schuylkill and Delaware Rivers.
 County: Seat of Philadelphia Co. (co-terminous).
 Churches: Roman Catholic, 147; Jewish, 127; Protestant and other, 976.
 City-owned parks: 113 (8,184 ac.).
 Telephones (1960): 1,066,993.
 Television sets (1960): 584,940.
 Radio stations: AM, 12; FM, 12.
 Television stations: 5.
 Assessed valuation (1960): \$3,951,361,270.

City tax rate (1960): \$3.66 per \$100.
 Net bonded debt (Jan. 1, 1960): \$622,013 (tax supported).
 Revenue (1959): \$209,199,000.
 Expenditure (1959): \$206,442,000.

PITTSBURGH, PA.

Incorporated as city: 1816.
 Mayor: Joseph M. Barr (to Dec. 1961).
 1940 population & (rank): 671,659 (10).
 1950 population & (rank): 876,806 (12).
 1940-50 population change: +0.8%.
 1960 land area: 55.23 sq. mi.
 Altitude: Highest, 1,240 ft.; lowest, 715.
 Location: In SW part of state, at beginning of Ohio River.
 County: Seat of Allegheny Co.
 Churches: Protestant, 348; Roman Catholic, 86; Jewish, 28; Orthodox, 26.
 City-owned parks: 25; 13 parklets (2,010 sq. ft.).
 Telephones (1960): 541,262.
 Radio sets (1958): 454,900.
 Television sets (1959): 443,670.*
 Radio stations: AM, 10; FM, 6.
 Television stations: 4.
 Assessed valuation (1960): Land, \$429,632; buildings, \$777,149,801.
 City tax rate (1960): Land, \$37 per \$1,000; buildings, \$18.50 per \$1,000.
 Bonded debt (1960): \$53,867,500.
 Revenue (1960): \$55,511,157.
 Expenditure (1959): \$55,511,157.
 * Allegheny County.

PORTLAND, OREG.

Incorporated as city: 1851.
 Mayor: Terry D. Shrunk (to Jan. 1965).
 1940 population & (rank): 305,394 (27).
 1950 population & (rank): 373,628 (29).
 1940-50 population change: +22.3%.
 1960 estimated population: 370,339.
 1960 land area: 78 sq. mi.
 Altitude: Highest, 1,073 ft.; lowest, sea level.
 Location: In NW part of state, on Willamette River.
 County: Seat of Multnomah Co.
 Churches: Protestant, 475; Roman Catholic, 35; Jewish, 10; Buddhist, 2.
 City-owned parks: 120 (6,203 ac.).
 Telephones (1960): 271,541.
 Radio stations: AM, 10; FM, 6.
 Television stations: 3.
 Assessed valuation (1959-60): \$842,422,720 (40% of true cash value).
 City tax rate (1959-60): \$5.64 per \$100 (40% of true cash value).
 Bonded debt (June 30, 1960): \$39,774,129.
 Revenue (1960-61): \$59,390,070.
 Expenditure (1960-61): \$59,390,070.

PROVIDENCE, R. I.

Incorporated as city: 1832.
 Mayor: Walter H. Reynolds (to Jan. 1964).
 1940 population & (rank): 253,504 (37).
 1950 population & (rank): 248,674 (43).
 1940-50 population change: -1.9%.
 1940 land area: 17.9 sq. mi.
 Altitude: Highest, 253 ft.; lowest, sea level.
 Location: In northern part of state, at mouth of Providence River.
 County: Seat of Providence Co.
 Churches: Protestant, 97; Catholic, 30.
 City-owned parks: 33 (815 ac.).
 Radio stations: AM, 6; FM, 3.

stations: 2
 rate (1958): \$39 per \$1,000.
 ed debt (Sept. 30, 1959): \$38,528,053.
 (1959-60 est. budget): \$39,338,150.
 ure (1959-60 est. budget): \$39,301,585.

RICHMOND, VA.

ted as city: 1782.
 Claude Woodward (to June 30, 1962).
 nager: Horace H. Edwards (Apptd.
 ulation & (rank): 193,042 (45).
 ulation & (rank): 230,310 (46).
 population change: +19.3%.
 : 39.89 sq. mi.
 Highest, 312 ft.; lowest, 0.
 In east central part of state, on
 River.
 Administratively independent.
 : 344 (metropolitan area).
 d recreation facilities: 18 parks, 35
 ounds, 28 athletic fields, etc.
 tions: AM, 8; FM, 4.
 stations: 4 (in area).
 valuation (1959): \$914,974,154.
 rate (1959): Real, \$1.88 per \$100; per-
 \$2.20 per \$100; machinery, \$1 per
 d debt (June 30, 1959): \$45,237,202.
 (1958-59): \$35,970,860.
 re (1958-59): \$35,062,940.

ROCHESTER, N. Y.

ted as city: 1834.
 eter Barry (to Dec. 1961).
 nager: F. Dow Hamblin (apptd. 1959).
 ulation & (rank): 324,975 (23).
 ulation & (rank): 332,488 (32).
 population change: +2.3%.
 area: 36.4 sq. mi.
 Highest, 655 ft.; lowest, 246 ft.
 In W. part of state, on Genesee R.
 Seat of Monroe Co.
 Protestant, 128; Roman Catholic,
 vish, 19; others, 22.
 d parks: 23 (2,000 ac.).
 s (1958): 214,743.
 (1958): 174,200.
 sets (1958): 162,070.
 tions: AM, 6; FM, 2.
 stations: 3.
 valuation (1959-60): \$677,693,565.
 ate (1959-60): \$45.39 per \$1,000.
 bt (Apr. 14, 1959): \$34,674,500.
 (1958-59): \$59,019,525.
 re (1958-59): \$55,321,303.

ST. LOUIS, MO.

ted as city: 1822.
 aymond R. Tucker (to Apr. 1961).
 ulation & (rank): 816,048 (8).
 ulation & (rank): 856,796 (8).
 population change: +5.0%.
 area: 61.0 sq. mi.
 Highest, 605 ft.; lowest, 410 ft.
 On Mississippi River.
 Independent city, not in county.
 1,102.
 d parks: 71 (3,198.60 ac.).
 s (1959): 734,000 (in service zone).
 h radios: 616,300 (est.).
 sets (1960): 640,000 (est.).
 tions (1960): AM, 13; FM, 3.

Television stations (1960): 5.
 Assessed valuation (1960): \$1,506,790,067.
 City tax rate (1960): \$3.79 per \$100.
 Bonded debt (1960): \$79,064,200.
 Revenue (1960): \$64,903,614.
 Expenditure (1960): \$63,298,422.

ST. PAUL, MINN.

Chartered as city: 1853.
 Mayor: George J. Vavoulis (to June 1962).
 1940 population & (rank): 287,736 (33).
 1950 population & (rank): 311,349 (35).
 1940-50 population change: +8.2%.
 1959 estimated population: 345,000.
 1955 land area: 55.44 sq. mi.
 Altitude: Highest, 1,045 ft.; lowest, 683.
 Location: In SE central part of state, on
 Mississippi River.
 County: Seat of Ramsey Co.
 Churches: Protestant, 250; Catholic, 54; Jew-
 ish, 4.
 City-owned parks: 5 (2,300 ac.).
 Telephones (Jan. 31, 1960): 231,204.
 Radio stations: 4.
 Television stations: 4.
 Assessed valuation (1959): \$236,013,089.
 City tax rate (1960): \$118.46 per \$1,000.
 Bonded debt (Feb. 29, 1960): Gross, \$65,035,000;
 net, \$39,114,000.
 Revenue (1959): \$75,108,135.
 Expenditure (1960): \$70,447,567.

SAN ANTONIO, TEX.

Incorporated as city: 1837.
 Mayor: J. Edwin Kuykendall (to May 1961).
 City Manager: Lynn H. Andrews (apptd. Feb.
 1958).
 1940 population & (rank): 253,854 (36).
 1950 population & (rank): 408,442 (25).
 1940-50 population change: +60.9%.
 1959 land area: 160.27 sq. mi.
 Altitude: 717 ft.
 Location: In south central part of state, on
 San Antonio River.
 County: Seat of Bexar Co.
 City-owned parks: Approx. 3,000 ac.
 Radio stations (1959): AM, 9; FM, 3.
 Television stations (1960): 4.
 Assessed valuation (1960): \$823,801,240.
 City tax rate (1960): \$1.82 per \$100.
 Bonded debt (1960): \$41,515,108.
 Revenue (1960): \$23,690,876.
 Expenditure (1960): \$23,153,493.

SAN DIEGO, CALIF.

Incorporated as city: 1850; again in 1872.
 Mayor: Charles C. Dail (to May 1963).
 City Manager: George E. Bean (apptd. Dec.
 1957).
 1940 population & (rank): 203,341 (43).
 1950 population & (rank): 334,387 (31).
 1940-50 population change: +64.4%.
 1960 est. population: 572,000.
 1960 land area: 196.5 sq. mi.
 Altitude: Highest, 822 ft.; lowest, sea level.
 Location: In south part of state, on San
 Diego Bay.
 County: Seat of San Diego.
 Churches: Roman Catholic, 30; Jewish, 4;
 Protestant & other, 278.
 City-owned parks: 78 (6,775 ac.).
 Telephones: 222,364.
 Radio stations: AM, 9; FM, 3.

Television stations: 2.
 Assessed valuation (1960-61): \$875,698,460.
 City tax rate (1960-61): \$1.85 per \$100.
 Bonded debt (1960-61): \$34,454,500.
 Revenue (1960-61): \$68,236,682.
 Expenditure (1960-61): \$68,236,682.

SAN FRANCISCO, CALIF.

Incorporated as city: 1850.
 Mayor: George Christopher (to Jan. 1964).
 1940 population & (rank): 634,536 (12).
 1950 population & (rank): 775,357 (11).
 1940-50 population change: +22.2%.
 1960 estimated population: 719,609.
 1950 area: Land, 44.6 sq. mi.; inland water, 48.5.
 Altitude: Highest, 900 ft.; lowest, sea level.
 Location: Between Pacific Ocean and San Francisco Bay.
 County: Coextensive with San Francisco Co.
 Churches (1958): 516 of all denominations.
 City-owned parks & squares (1960): 60.
 Telephones (Jan. 1960): 507,001.
 Homes with radios: 203,500.
 Television sets: 270,000.
 Radio stations (1960): AM, 10; FM, 8.
 Television stations in operation (1960): 5.
 Assessed valuation (1959-60): \$2,097,666,388.
 City tax rate (1959-60): \$8.09 per \$100.
 Bonded debt (July 1, 1959): \$228,935,000.
 General city revenue bonds (1958-59): \$189,738,-170.
 General city expenditures (1958-59): \$190,288,-002.

SEATTLE, WASH.

Incorporated as city: 1869.
 Mayor: Gordon S. Clinton (to April, 1964).
 1940 population & (rank): 368,302 (22).
 1950 population & (rank): 467,591 (19).
 1940-50 population change: +27.0%.
 1960 estimated population: 551,539.
 1960 area: Land, 91.57 sq. mi.; inland water, 3.07 sq. mi.
 Altitude: Highest, 540 ft.; lowest, sea level.
 Location: In west central part of state, on Puget Sound.
 County: Seat of King Co.
 Churches: Protestant, 267; Roman Catholic, 30; Jewish, 6.
 City-owned parks: 183 (3,136 ac.).
 Telephones (1957): 349,682.
 Homes with radios (1957): 246,945.
 Homes with television sets (1957): 312,900.*
 Radio stations: AM, 13; FM, 4.
 Television stations: 6.
 Assessed valuation (1959): \$730,716,061.
 City tax rate (1959): \$60 per \$1,000.
 Bonded debt (Dec. 31, 1959): \$30,400,000.
 General govt. revenue (1959): \$45,396,812.
 General govt. expenditure (1959): \$42,410,935.
 * Metropolitan area.

SYRACUSE, N. Y.

Incorporated as city: 1848.
 Mayor: Anthony A. Henninger (Dec. 1961).
 1940 population & (rank): 205,967 (41).
 1950 population & (rank): 220,583 (47).
 1940-50 population change: +7.1%.
 1950 land area: 25.77 sq. mi.
 Altitude: Highest, 840 ft.; lowest, 363.
 Location: Central part of state, at eastern end of Finger Lakes.

County: Seat of Onondaga Co.
 Churches: Protestant, 74; Roman Catholic, 25; Jewish, 8; other, 16.
 City-owned parks: 104.
 Telephones (1960): 117,207 (metro. area).
 Radio sets (1960): 500,000 (Onondaga Co.).
 Radio stations: AM, 5; FM, 2.
 Television stations: 2.
 Assessed valuation (1960): Real estate, 1,097,912; special franchise, \$21,048,499.
 City tax rate (1960): \$21.962 per \$1,000.
 School tax rate (1960): \$21.569 per \$1,000.
 Bonded debt (Jan. 1, 1960): \$4,577,750.
 Revenue (1959): \$34,792,574 (including levy).
 Expenditure (1959): \$35,518,897.

TOLEDO, OHIO

Incorporated as city: 1837.
 Mayor: Michael J. Damas (to Dec. 1961).
 City Manager: John R. Alspach (apptd. 1960).
 1940 population & (rank): 282,349 (34).
 1950 population & (rank): 303,616 (36).
 1940-50 population change: +7.5%.
 1960 estimated population: 315,643.
 1960 land area: 48.62 sq. mi.
 Altitude: 630 ft.
 Location: In NW part of state, on Maumee River at Lake Erie.
 County: Seat of Lucas Co.
 Churches: Protestant, 254; Roman Catholic, 36; Jewish, 5; other, 86.
 City-owned parks & playgrounds: 53 (2,216 ac.).
 Telephones (1960): 210,612.
 Radio sets (1954): 95,420.
 Television sets (1954): 107,100.
 Radio stations: AM, 4; FM, 4.
 Television stations: 2.
 Assessed valuation (1960): \$871,394,220.
 City tax rate (1959): \$25.90 per \$1,000.
 Bonded debt: All offset by trust fund.
 Revenue (1959): \$39,911,308.
 Expenditure (1959): \$36,001,251.

WASHINGTON, D. C. See index.

WORCESTER, MASS.

Incorporated as town: 1722.
 Incorporated as city: 1848.
 Mayor: James D. O'Brien (to Jan. 1962).
 City Manager: Francis J. McGrath (apptd. Apr. 1951).
 1940 population & (rank): 193,694 (44).
 1950 population & (rank): 203,486 (50).
 1940-50 population change: +5.1%.
 1955 population: 202,612.
 1950 land area: 37.0 sq. mi.
 Altitude: Highest, 1,051 ft.; lowest, 359 ft.
 Location: In central part of state.
 County: Seat of Worcester Co.
 Churches: Protestant, 85; Roman Catholic, 10; Jewish, 10.
 City-owned parks: 52 (1,319 ac.).
 Telephones (1955): 82,782.
 Radio sets (1955): 137,453.
 Television sets (1955): 54,981.
 Radio stations (1955): AM, 4; FM, 1.
 Television stations (1955): 1.
 Assessed valuation (1959): \$360,756,000.
 City tax rate (1959): \$73.40 per \$1,000.
 Bonded debt (Dec. 31, 1959): \$26,963,000.
 Revenue (1959): \$48,447,157.
 Expenditure (1959): \$48,447,157.

Tabulated Data on State Governments

Source: Questionnaires to the states.

State	GOVERNOR		LEGISLATURE ¹						HIGHEST COURT ²		
	Term	Annual salary	Membership U ³	L ⁴	Term U ³	L ⁴	Salaries of members ⁵		Members	Term	Annual salary
.....	4 ⁶	\$25,000	35	106	4	4	\$ 30 per diem		7	6	\$14,000
.....	4	25,000	20	40	4	2	3,000 per annum ⁷		3	10	22,500 ⁸
.....	2	18,500	28	80	2	2	1,800 per annum ⁹		5	6	15,000
.....	2	10,000	35	100	4	2	1,200 per annum		7	8	15,000
.....	4	40,000	40	80	4	2	6,000 per annum		7	12	26,000 ¹⁰
.....	4	20,000	35	65	4	2	4,800 per biennium		7	10	15,000
.....	4	15,000	36	279	2	2	2,500 per term		5	8	21,500 ⁸
.....	4	17,500	17	35	4	2	3,000 per annum		3	12	17,000 ¹⁰
.....	4 ⁶	22,500	38	95	4	2	1,200 per annum ¹¹		7	6	17,500
.....	4 ⁶	12,000	54	205	2	2	40 per diem		7	6	18,000
.....	4	25,000	25	51	4	2	2,500 per session ²⁹		5	7	22,000 ¹⁰
.....	4	12,500	44	59	2	2	10 per diem ¹¹		5	6	12,000
.....	4	25,000	58	177	4	2	12,000 per biennium		7	9	20,000
.....	4 ⁶	15,000	50	100	4	2	1,800 per annum		5	6	15,000
.....	2	20,000	50	108	4	2	30 per diem		9	6	14,500
.....	2	15,000	40	125	4	2	5 per diem		7	6	12,000 ⁸
.....	4 ⁶	18,000	38	100	4	2	25 per diem ⁵		7	8	12,000
.....	4 ⁶	20,000	39	101	4	4	50 per diem ¹²		7	14	18,500 ¹⁸
.....	4	10,000	33	151	2	2	1,400 per session		6	7	11,000 ⁸
.....	4 ¹³	15,000	29	123	4	4	1,800 per annum ³¹		5	15	21,000 ⁸
.....	2	20,000	40	240	2	2	5,200 per annum		7	Life	17,000
.....	2	22,500	34	110	2	2	4,000 per annum		8	8	18,500
.....	2	19,000	67	131	4	2	4,800 per session ¹⁴		7	6	19,000 ⁸
.....	4 ⁶	25,000	49	140	4	4	3,000 per session		9	8	13,500 ¹⁵
.....	4 ⁶	25,000	34	157	4	2	1,500 per annum		7	12	18,500
.....	4	12,500	56	94	4	2	20 per diem		5	6	11,000
.....	2	11,000	43 ¹⁶		2 ¹⁶		872 per annum		7	6	12,000
.....	4	18,000	17	47	4	2	25 per diem ¹⁷		3	6	18,000
.....	2	15,500	24	(1 ⁸)	2	2	200 per biennium		5	(1 ⁹)	15,500
.....	4 ¹³	30,000	21	60	4	2	5,000 per annum		7	(2 ⁰)	24,000 ⁸
.....	2 ¹³	17,500	32	66	4	2	20 per diem		5	8	17,500
.....	4	50,000	58	150	2	2	7,500 per annum		7	14	36,500 ²¹
.....	4 ⁶	15,000	50	120	2	2	15 per diem ²²		7	8	16,000
.....	2	10,000	49	113	4	2	5 per diem		5	10	14,000
.....	4	25,000	33	136	4	2	5,000 per annum		7	6	16,000
.....	4 ⁶	15,000	44	(2 ³)	4	2	15 per diem		9	6	12,500
.....	4 ¹³	17,500	30	60	4	2	600 per annum		7	6	16,000
.....	4 ⁶	35,000	50	210	4	2	6,000 per session		7	21	30,000 ²⁴
.....	2	15,000	44	100	2	2	5 per diem ¹⁷		5	(2 ⁴)	17,000 ⁸
.....	4 ⁶	15,000	46	124	4	2	1,000 per session		5	10	12,500 ⁸
.....	2 ¹³	13,000	35	75	2	2	1,800 per biennium		5	6	11,000
.....	4 ⁶	12,000	33	99	2	2	10 per diem ²⁵		5	8	15,000 ²⁶
.....	2	25,000	31	150	4	2	25 per diem ²²		(2 ⁷)	6	20,000
.....	4	12,000	25	64	4	2	500 per annum ²⁸		5	10	12,000
.....	2	12,500	30	246	2	2	70 per week		5	2	10,500 ¹⁰
.....	4 ⁶	20,000	40	100	4	2	1,080 per session		7	12	17,500 ⁸
.....	4	15,000	49	99	4	2	1,200 per annum		9	6	20,000
.....	4 ⁶	17,500	32	100	4	2	1,500 per annum		5	12	17,500
.....	2	20,000	33	100	4	2	300 per month		7	10	17,500 ¹⁰
.....	4	15,000	27	56	4	2	12 per diem		4	8	13,000

General Assembly in Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Maryland, Missouri, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia; Legislative Assembly in North Dakota, Oregon; General Court in Massachusetts, New Hampshire; in other states. Meets annually in Alaska, Arizona, California, Colorado, Delaware, Georgia, Illinois, Indiana, Maryland, Massachusetts, Michigan, Nevada, New Jersey, New York, Pennsylvania, Rhode Island, South Carolina, West Virginia; biennially in other states. ² Known as Court of Appeals in Kentucky, South Carolina, West Virginia; Supreme Court of Appeals in Virginia, West Virginia; Supreme Judicial Court in Maine, Massachusetts; Supreme Court of Errors in Connecticut; Supreme Court in other states. ³ Upper house; known as Senate in all states. ⁴ Lower house; known as Assembly in California, Nevada, New York, Wisconsin; House of Representatives in Maryland, Virginia, West Virginia; House of General Assembly in New Jersey; House of Representatives in other states. ⁵ Does not include additional payment for expenses, mileage, etc. ⁶ Cannot succeed for more than one term. ⁷ Chief Justice's salary is \$1,000 higher. ⁸ Plus \$20 per diem for session. ⁹ Plus \$40 per diem while in session. ¹⁰ Chief Justice's salary is \$500 higher. ¹¹ Plus \$15 per diem while in session. ¹² Plus \$150 per diem while in session. ¹³ May not serve a third consecutive term. ¹⁴ House salary; Senate salary. ¹⁵ Chief Justice's salary is \$750 higher. ¹⁶ Unicameral legislature. ¹⁷ For 60 days only. ¹⁸ Varies from 1 to 12 years. ¹⁹ Until 70 years old. ²⁰ During good behavior; retired at 70. ²¹ Chief Justice's salary is \$2,500 higher. ²² Varies from 120 to 123. ²³ Term of good behavior. ²⁴ For 75 days only. ²⁵ Chief Justice's salary is \$1,500 higher. ²⁶ 9 members in Supreme Court (highest in civil cases); 3 members in Court of Criminal Appeals. ²⁷ Plus \$5 per diem while in session. ²⁸ Per regular session; \$1,500 for each budget session. ²⁹ Chief Justice's salary is \$2,000 higher. ³⁰ Speaker and president of Senate receive \$2,050.

Tabulated Data on City Governments

Source: Questionnaires to the cities.

City	MAYOR		City manager's salary ^{1,2}	COUNCIL OR COMMISSION		
	Term, years	Salary ¹		Name	Members	Term, years
Akron, Ohio.....	2	\$16,000	.....	Council	13	2
Atlanta, Ga.....	4	20,000	.....	Bd. of Aldermen	17	4
Baltimore, Md.....	4	15,000	.....	Council	21	4
Birmingham, Ala.....	4	13,000	.....	Commission	3	4
Boston, Mass.....	4	20,000	.....	Council	9	2
Buffalo, N. Y.....	4	20,000	.....	Council	15	2 ⁴
Chicago, Ill.....	4	35,000	.....	Council	50	4
Cincinnati, Ohio.....	2	10,608	\$30,000	Council	9	2
Cleveland, Ohio.....	2	25,000	.....	Council	33	2
Columbus, Ohio.....	4	15,000	.....	Council	7	4
Dallas, Tex.....	2	20 ³	24,806	Council	9	2
Dayton, Ohio.....	4	1,800	25,000	Commission	5	4
Denver, Colo.....	4	14,000	.....	Council	9	4
Detroit, Mich.....	4	25,000	.....	Council	9	4
Ft. Worth, Tex.....	2	10 ²²	30,000	Council	9	2
Honolulu, Hawaii.....	2 ²⁷	20,000	.....	Council	7 ²⁸	2 ²⁷
Houston, Tex.....	2	20,000	.....	Council	8	2
Indianapolis, Ind.....	4	13,200	.....	Council	9	4
Jacksonville, Fla.....	4	12,000	.....	(²³)	(²³)	4
Jersey City, N. J.....	4	12,000	.....	Commission	5	4
Kansas City, Mo.....	4	15,000	27,500	Council	9 ¹³	4
Long Beach, Calif.....	3	200 ³	22,500	Council	9	3
Los Angeles, Calif.....	4	25,000	.....	Council	15	4
Louisville, Ky.....	4	12,000	.....	Bd. of Aldermen	12	2
Memphis, Tenn.....	4	17,500	.....	Commission	5	4
Miami, Fla.....	2	5,000 ²⁹	22,500 ²⁹	Commission	5 ¹³	4
Milwaukee, Wis.....	4	20,000	.....	Council	20	4
Minneapolis, Minn.....	2	12,000	.....	Council	13	2
New Orleans, La.....	4	25,000	.....	Council	7	4
New York, N. Y.....	4	40,000	30,000 ²¹	Council	25	4
Newark, N. J.....	4	25,000	.....	Council	9	4
Norfolk, Va.....	2	3,600	25,000	Council	7	4
Oakland, Calif.....	4	7,500	25,000	Council	9 ¹³	4
Oklahoma City, Okla.....	4	1,000	19,500	Council	8	4
Omaha, Nebr.....	4	17,500	.....	Council	7	4
Philadelphia, Pa.....	4	25,000	.....	Council	17	4
Pittsburgh, Pa.....	4	20,000	.....	Council	9	4
Portland, Oreg.....	4	15,017	.....	Commission	4	4
Providence, R. I.....	2	15,000	.....	Council	26	2
Richmond, Va.....	2	1,800	23,000	Council	9 ¹³	2
Rochester, N. Y.....	2	1,500	19,200	Council	9	4
St. Louis, Mo.....	4	10,000	.....	Bd. of Aldermen	29	4
St. Paul, Minn.....	2	10,800	.....	Council	7 ¹³	2
San Antonio, Tex.....	2	3,000 ¹⁵	25,000	Council	9	2
San Diego, Calif.....	4	12,000	28,000	Council	6	4
San Francisco, Calif.....	4	31,200	24,000 ¹⁴	Bd. of Supervisors	11	4
Seattle, Wash.....	4	20,000	.....	Council	9	4
Syracuse, N. Y.....	4	20,000	.....	Council	10	2 ¹³
Toledo, Ohio.....	2	8,200	20,000	Council	9 ²⁴	2
Worcester, Mass.....	2	5,000	20,000	Council	9	2

¹ Annual, unless otherwise indicated. ² City Manager's term is indefinite and at will of Council. ³ Per month. ⁴ For 8 District Councilmen; 4 years for 5 Councilmen-at-large. ⁵ Per Council meeting. ⁶ For 3 members; 2 for 9 members. ⁷ Per month part-time. ⁸ Per council meeting; not over \$1,040 per year. ⁹ President receives \$1,000. ¹⁰ President receives \$4,000. ¹¹ After April 1, 1961 president will receive \$7,500; aldermen, \$5,000. ¹² Including salary by Mayor, for life. ¹³ Plus Council pay. ¹⁴ President receives \$6,500. ¹⁵ Chief Administrative Officer; appointed by Mayor; President receives \$350. ¹⁶ For 5 District Councilmen; 4 years for 4 Councilmen-at-large and President. ¹⁷ President receives \$12,000. ¹⁸ Appointed at pleasure of Mayor, with title of Administrator. ¹⁹ Per week and per Council meeting. ²⁰ City has both Council and Commission. Council: members 9; salary, \$1,500. Commission: members, 5; salary, \$6,000. ²¹ Including Mayor and Vice-Mayor; latter \$5,600. ²² President receives \$6,500. Vice President \$4,725. ²³ President receives \$2,000. ²⁴ 4 years beginning Jan. 2, 1961. ²⁵ 9 beginning Jan. 2, 1961. ²⁶ Plus stipulated expense allowance.

UNITED STATES STATISTICS

POPULATION

Population Growth of the United States

Source: U. S. Bureau of the Census. (For 1960 census, see Table of Contents.)

estimates		National censuses			Projections*	
Population	Year	Population	Land area, sq. mi.	Pop. per sq. mi.	Year	Population†
210	1790.....	3,929,214	867,980	4.5	1960.....	NOTE A 181,154,000
2,499	1800.....	5,308,483	867,980	6.1	1965.....	198,950,000
5,700	1810.....	7,239,881	1,685,865	4.3	1970.....	219,474,000
27,947	1820.....	9,638,453	1,753,588	5.5	1975.....	243,880,000
					1980.....	272,557,000
51,700	1830.....	12,866,020	1,753,588	7.3		
84,800	1840.....	17,069,453	1,753,588	9.7	1960.....	NOTE B 180,126,000
114,500	1850.....	23,191,876	2,944,337	7.9	1965.....	195,747,000
155,600	1860.....	31,443,321	2,973,965	10.6	1970.....	213,810,000
213,500	1870.....	39,818,449	2,973,965	13.4	1975.....	235,246,000
					1980.....	259,981,000
275,000	1880.....	50,155,783	2,973,965	16.9		
357,500	1890.....	62,947,714	2,973,965	21.2	1960.....	NOTE C 179,773,000
474,388	1900.....	75,994,575	2,974,159	25.6	1965.....	193,643,000
654,950	1910.....	91,972,266	2,973,890	30.9	1970.....	208,199,000
889,000	1920.....	105,710,620	2,973,776	35.5	1975.....	225,552,000
					1980.....	245,409,000
1,207,000	1930.....	122,775,046	2,977,128	41.2		
1,610,000	1940.....	131,669,275	2,977,128	44.2	1960.....	NOTE D 179,420,000
2,205,000	1950.....	151,132,000‡	2,974,726	50.8	1965.....	191,517,000
2,781,000	1959§.....	177,103,000‡	3,545,791	49.9	1970.....	202,541,000
	1960**.....	179,452,000	3,552,197	50.5	1975.....	215,790,000
					1980.....	230,834,000

United States excluding Alaska and Hawaii. † Figures relate to July 1 and include armed forces overseas. Armed forces overseas. § Figures include Alaska. ** Feb. 1960; Figures include Alaska and Hawaii. Projection assumes that fertility will average 10% above the 1955-57 level for the whole projection period 1958-80. NOTE B: Projection assumes that fertility will remain constant at the 1955-57 level for the whole period 1958-80. NOTE C: Projection assumes that fertility will decline from the 1955-57 level to the 1955-57 level by 1965-70, then remain at this level to 1980. NOTE D: Projection assumes that fertility will decline from the 1955-57 level to the 1942-44 level by 1965-70, then remain at this level to 1980.

Estimates of World Population by Regions, 1650-1959

Source: W. F. Willcox, 1650-1900; United Nations, 1920-1957.

Estimated population in millions							
Africa	North America ¹	Latin America ²	Asia (exc. U.S.S.R.) ³	Europe and Asiatic U.S.S.R. ³	Oceania	World total	
100	1	7	257	103	2	470	
100	1	10	437	144	2	694	
100	26	33	656	274	2	1,091	
141	81	63	857	423	6	1,571	
140	117	91	966 ⁴	487 ⁵	8.8	1,810	
155	135	109	1,072 ⁴	532 ⁵	10.4	2,013	
172	146	131	1,212 ⁴	573 ⁵	11.3	2,246	
198	168	163	1,376 ⁴	576 ⁵	13.2	2,494	
236	196	202	1,622	633 ⁵	16.1	2,905	

Alaska, Canada, and St. Pierre and Miquelon. ² Mexico, Central and South America, and Caribbean. Estimates for Asia and Europe by Willcox have been adjusted to include population of Asiatic U.S.S.R. Europe rather than Asia. ³ Includes Syria and Asiatic Turkey but excludes U.S.S.R. ⁴ Includes European and U.S.S.R. ⁵ Includes European Turkey and allowance for population of U.S.S.R.

CRIME

Distribution of Arrests by Sex, 1959

Source: Federal Bureau of Investigation.

(Data in this table are from reports furnished the FBI by 1,789 cities over 2,500 in population. This represents a total population of 56,187,181.)

Offense charged	Males	Per cent	Females	Per cent	Total
Criminal homicide:					
Murder and nonnegligent manslaughter.....	2,076	.1	534	.2	2,610
Manslaughter by negligence.....	1,192	.1	127	*	1,319
Robbery.....	14,669	.6	710	.3	15,379
Aggravated assault.....	24,970	1.1	4,890	1.8	29,860
Other assaults.....	87,736	3.8	9,382	3.4	97,118
Burglary—breaking or entering.....	63,270	2.7	1,774	.6	65,044
Larceny—theft.....	112,016	4.8	20,425	7.3	132,441
Auto theft.....	32,339	1.4	1,070	.4	33,409
Embezzlement and fraud.....	17,889	.8	3,120	1.1	21,009
Stolen property; buying, receiving, etc.....	5,551	.2	564	.2	6,115
Forgery and counterfeiting.....	10,061	.4	1,946	.7	12,007
Forcible rape.....	4,002	.2	.....	...	4,002
Prostitution and commercialized vice.....	6,447	.3	12,067	4.3	18,514
Other sex offenses (includes statutory rape).....	23,025	1.0	6,244	2.2	29,269
Narcotic drug laws.....	8,856	.4	1,706	.6	10,562
Weapons; carrying, possessing, etc.....	21,070	.9	1,161	.4	22,231
Offenses against family and children.....	23,725	1.0	2,317	.8	26,042
Liquor laws.....	52,733	2.3	8,985	3.2	61,718
Driving while intoxicated.....	103,407	4.4	6,271	2.2	109,678
Disorderly conduct.....	272,735	11.7	50,618	18.1	323,353
Drunkenness.....	939,318	40.3	72,109	25.8	1,011,427
Vagrancy.....	100,865	4.3	8,251	3.0	109,116
Gambling.....	61,616	2.6	6,466	2.3	68,082
Suspicion.....	88,209	3.8	11,454	4.1	99,663
All other offenses.....	255,817	11.0	46,919	16.8	302,736
TOTAL ARRESTS, 1959.....	2,333,594	100.0	279,110	100.0	2,612,704

* Less than one-tenth of one per cent.

Arrests by Age Groups, 1959*

Source: Federal Bureau of Investigation.

Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests
Under 15.....	120,492	18.....	71,674	22.....	63,413	30-34.....	303,448	50 & over.....	43
15.....	55,856	19.....	66,276	23.....	59,465	35-39.....	312,667	Not known.....	2,611
16.....	72,285	20.....	61,066	24.....	63,111	40-44.....	267,615	TOTAL.....	2,611
17.....	72,036	21.....	66,906	25-29.....	283,755	45-49.....	240,375		

* Data from same sources as table above: 1,789 cities over 2,500.

Crime Index Trends, 1958-59

Source: Federal Bureau of Investigation.

Crime index classification	Estimated number of offenses		Per cent change	
	1958	1959	Number	Rate per 100
Murder.....	8,222	8,583	+4.4	+2.1
Forcible rape.....	14,606	14,832	+1.5	-1.2
Robbery.....	75,493	71,535	-5.2	-7.1
Aggravated assault.....	113,654	114,614	+5.2	+3.1
Burglary.....	684,826	685,862	+0.2	-1.9
Larceny over \$50.....	393,622	403,426	+2.5	+0.4
Auto theft.....	282,787	288,337	+2.0	-0.1
TOTAL.....	1,573,210	1,592,189	+1.2	-0.3

NOTE: Estimated crime totals for the U. S. appearing above are not comparable to such totals published in previous years.

enced Federal Prisoners Received from Courts, 1945-1959

Fiscal years ending June 30
Source: Federal Bureau of Prisons.

Offense	1945	1948	1950	1954	1956	1957	1958	1959
.....	47	64	260	88	54	80	70	110
rihuana.....	454	588	878	509	325	414	303	246
.....	680	855	1,151	1,366	1,189	1,273	1,264	1,123
and fraud.....	340	531	609	445	453	515	540	590
.....	626	954	1,274	1,484	1,572	1,507	1,545	1,687
ws.....	3,996	3,200	3,463	7,277	1,771	1,556	1,654	1,637
.....	15	103	164	203	241	251	189	185
quency.....	911	677	658	829	825	963	953	869
.....	20	36	41	41	19	34	26	36
.....	2,988	1,838	2,304	2,143	2,183	2,376	2,378	2,440
.....	45	68	92	193	212	211	242	293
rstate commerce.....	475	430	270	320	318	310	292	327
etc., of stolen motor vehicle.....	1,072	2,612	2,486	2,838	2,835	3,020	3,295	3,400
ffic.....	209	221	185	242	206	195	134	139
n, D. C., high seas and terr. cases.....	986	1,069	1,145	1,487	1,365	1,592	1,667	1,748
.....	1,748	1,868	2,104	1,851	1,882	1,941	1,914	2,141
ty offenses:								
vice Acts.....	2,613	236	136	342	136	194	197	164
al-defense and security laws.....	2,150	319	130	167	132	108	104	128
t-martial cases: Army.....	1,793	851	606	639	952	166	82	5
.....	32	267	107	33	30	27	8	13
FFENSES:	21,200	16,787	18,063	22,497	16,700	16,733	16,857	17,281

Methods of Execution in the United States

Source: Information Please Almanac questionnaires to the states.

Method	State	Method
.....	New Hampshire	Hanging
.....	New Jersey	Electrocution
.....	New Mexico	Lethal gas
.....	New York	Electrocution
.....	North Carolina	Lethal gas
.....	North Dakota	No death penalty
.....	Ohio	Electrocution
.....	Oklahoma	Lethal gas ¹
.....	Oregon	Lethal gas
.....	Pennsylvania	Electrocution
.....	Rhode Island	No death penalty ²
.....	South Carolina	Electrocution
.....	South Dakota	Electrocution
.....	Tennessee	Electrocution
.....	Texas	Electrocution
.....	Utah	Hanging
.....		or shooting ³
.....	Vermont	Electrocution
.....	Virginia	Electrocution
.....	Washington	Hanging
.....	West Virginia	Electrocution
.....	Wisconsin	No death penalty
.....	Wyoming	Lethal gas
.....	U. S. (Fed. Gov't.) ..	(⁴)
.....	American Samoa	Hanging
.....	Canal Zone	Hanging
.....	Guam	Hanging
.....	Puerto Rico	No death penalty
.....	Virgin Islands	No death penalty

n until gas chamber is provided. ² However, a person who commits murder while under sentence of or life shall be hanged. ³ Condemned man has choice. ⁴ Method shall be that used by state in which used. If state does not have death penalty, Federal judge shall prescribe method for carrying out death ⁵ E. Method shown with each state is maximum penalty for murder and certain other crimes. In most capital punishment, jury or judge can specify whether sentence shall be death or life imprisonment.

HOSPITALS

Hospital Facilities in the U. S., 1959

Source: American Hospital Association.

State	Total—all hospitals			State	Total—all hospitals		
	No. of hospitals	No. of beds	Admissions during year*		No. of hospitals	No. of beds	Admissions during year*
Alabama.....	131	23,635	360,883	Nebraska.....	113	14,321	1,221
Alaska.....	23	1,666	35,336	Nevada.....	18	1,903	91
Arizona.....	72	8,212	180,162	New Hampshire....	38	6,611	91
Arkansas.....	81	14,675	222,667	New Jersey.....	151	53,098	58
California.....	445	123,466	1,867,410	New Mexico.....	52	5,470	12
Colorado.....	94	17,606	291,291	New York.....	485	230,182	2,287
Connecticut.....	70	25,880	325,196	North Carolina....	174	32,868	632
Delaware.....	16	5,370	49,539	North Dakota.....	64	5,908	115
D. of C.....	23	14,917	200,953	Ohio.....	257	80,019	1,202
Florida.....	160	28,762	591,322	Oklahoma.....	127	17,741	297
Georgia.....	141	27,437	491,578	Oregon.....	78	13,702	232
Hawaii.....	33	5,902	88,071	Pennsylvania.....	337	114,071	1,467
Idaho.....	50	3,723	95,674	Rhode Island.....	23	8,954	103
Illinois.....	324	106,639	1,343,610	South Carolina....	78	16,344	291
Indiana.....	135	31,362	549,250	South Dakota.....	64	7,618	115
Iowa.....	125	23,005	372,663	Tennessee.....	152	28,511	473
Kansas.....	152	18,456	300,189	Texas.....	556	62,019	1,347
Kentucky.....	131	23,029	411,030	Utah.....	36	4,706	105
Louisiana.....	134	24,145	482,222	Vermont.....	31	3,910	59
Maine.....	58	9,287	124,861	Virginia.....	121	32,482	495
Maryland.....	82	29,803	340,230	Washington.....	128	21,132	422
Massachusetts.....	209	65,216	715,972	West Virginia.....	90	15,779	295
Michigan.....	248	72,061	979,357	Wisconsin.....	198	31,561	615
Minnesota.....	199	36,350	547,825	Wyoming.....	31	3,723	54
Mississippi.....	105	14,391	257,462	Total.....	6,845	1,612,822	23,605
Missouri.....	142	39,258	568,525				
Montana.....	60	5,936	121,735				

* Data estimated for nonreporting hospitals. Excludes newborn. † No information for one hospital.

EXPECTATION OF LIFE

Expectation of Life and Mortality Rates, 1958

Source: Metropolitan Life Insurance Co. from abridged life tables published by National Office of Vital Statistics.

Age, years	Expectation of Life in Years					Mortality Rate per 1,000				
	Total Persons	White		Nonwhite		Total Persons	White		Nonwhite	
		Male	Female	Male	Female		Male	Female	Male	Female
0.....	69.4	67.2	73.7	60.6	65.5	2704	2671	2062	5032	4
1.....	70.4	68.1	74.2	62.8	67.3	172	154	142	328	
2.....	69.5	67.2	73.3	62.0	66.5	108	105	84	190	
3.....	68.6	66.2	72.4	61.1	65.6	81	81	66	124	
4.....	67.6	65.3	71.4	60.2	64.7	65	65	56	92	
5.....	66.7	64.3	70.5	59.3	63.8	61	58	43	89	
6.....	65.7	63.4	69.5	58.3	62.8	51	54	39	70	
7.....	64.8	62.4	68.5	57.4	61.9	43	49	36	58	
8.....	63.8	61.4	67.6	56.4	60.9	38	46	33	51	
9.....	62.8	60.5	66.6	55.4	59.9	34	43	30	48	
10.....	61.8	59.5	65.6	54.5	59.0	34	36	29	50	
11.....	60.9	58.5	64.6	53.5	58.0	36	41	28	56	
12.....	59.9	57.5	63.7	52.5	57.0	41	49	29	65	

Expectation of Life and Mortality Rates (Contd.)

Expectation of Life in Years					Mortality Rate per 1,000				
Total Persons	White		Nonwhite		Total Persons	White		Nonwhite	
	Male	Female	Male	Female		Male	Female	Male	Female
58.9	56.6	62.7	51.6	56.0	48	60	32	76	43
57.9	55.6	61.7	50.6	55.0	57	74	36	91	50
57.0	54.7	60.7	49.7	54.1	68	90	41	107	58
56.0	53.7	59.7	48.7	53.1	79	106	46	125	67
55.0	52.8	58.8	47.8	52.1	89	120	50	145	77
54.1	51.8	57.8	46.9	51.2	97	133	53	165	88
53.2	50.9	56.8	45.9	50.2	103	142	53	187	98
52.2	50.0	55.9	45.0	49.3	110	152	54	210	109
51.3	49.1	54.9	44.1	48.3	117	162	55	233	122
50.3	48.1	53.9	43.2	47.4	121	166	57	252	134
49.4	47.2	53.0	42.4	46.5	122	164	59	265	145
48.5	46.3	52.0	41.5	45.5	121	157	61	275	157
47.5	45.4	51.0	40.6	44.6	120	148	64	284	169
46.6	44.4	50.1	39.7	43.7	119	141	67	294	183
45.6	43.5	49.1	38.8	42.8	120	136	70	307	199
44.7	42.6	48.1	38.0	41.9	125	137	74	324	217
43.7	41.6	47.2	37.1	41.0	131	142	77	344	238
42.8	40.7	46.2	36.3	40.1	139	149	82	365	261
41.9	39.8	45.2	35.4	39.2	147	156	87	387	284
40.9	38.8	44.3	34.5	38.3	156	164	94	408	307
40.0	37.9	43.3	33.7	37.4	165	174	101	430	332
39.1	37.0	42.4	32.9	36.6	175	185	110	451	358
38.1	36.0	41.4	32.0	35.7	187	199	119	473	385
37.2	35.1	40.5	31.2	34.9	201	215	130	499	413
36.3	34.2	39.5	30.4	34.0	218	235	142	529	440
35.4	33.3	38.6	29.6	33.2	237	259	154	564	464
34.5	32.4	37.6	28.8	32.3	260	286	168	604	488
33.6	31.5	36.7	28.0	31.5	285	318	184	648	512
32.7	30.6	35.8	27.2	30.7	312	353	200	694	541
31.8	29.7	34.8	26.4	29.9	340	389	219	741	573
30.9	28.8	33.9	25.6	29.1	370	425	239	788	608
30.0	28.0	33.0	24.9	28.3	402	463	261	838	648
29.1	27.1	32.1	24.1	27.5	435	502	284	889	690
28.3	26.2	31.2	23.4	26.7	472	547	310	945	736
27.4	25.4	30.3	22.6	25.9	516	602	337	1005	792
26.6	24.6	29.4	21.9	25.2	566	670	367	1072	862
25.7	23.8	28.5	21.2	24.4	624	746	398	1143	940
24.9	22.9	27.6	20.5	23.7	686	830	433	1216	1023
24.1	22.2	26.8	19.8	23.0	749	914	471	1291	1106
23.3	21.4	25.9	19.2	22.3	812	997	509	1372	1188
22.5	20.6	25.0	18.5	21.6	873	1073	547	1460	1265
21.8	19.9	24.2	17.9	21.0	934	1148	587	1554	1340
21.0	19.2	23.3	17.3	20.3	998	1224	631	1654	1418
20.2	18.5	22.5	16.7	19.7	1068	1305	681	1753	1498
19.5	17.7	21.7	16.1	19.1	1142	1394	737	1839	1570
18.8	17.1	20.9	15.6	18.5	1220	1492	799	1906	1632
18.0	16.4	20.0	15.0	17.9	1304	1598	868	1960	1687
17.3	15.7	19.2	14.5	17.4	1387	1703	941	1995	1730
16.6	15.1	18.5	14.0	16.8	1475	1809	1023	2038	1778
15.9	14.4	17.7	13.5	16.3	1580	1925	1122	2124	1860
15.3	13.8	16.9	13.0	15.7	1708	2056	1242	2272	1988
14.6	13.2	16.2	12.5	15.2	1851	2194	1378	2456	2144
14.0	12.7	15.4	12.1	14.8	1998	2333	1522	2653	2306
13.4	12.1	14.7	11.8	14.4	2138	2461	1667	2812	2441
12.8	11.6	14.0	11.5	14.0	2264	2571	1813	2890	2532
12.2	11.1	13.3	11.3	13.7	2372	2658	1959	2859	2561
11.7	10.6	12.7	11.1	13.4	2463	2723	2105	2743	2539

polated by the Statistical Bureau of the Metropolitan Life Insurance Company from the abridged
 ed by the National Office of Vital Statistics in *Vital Statistics of the United States, 1968, Section 5.*

Expectation of Life in the United States, 1850-1958

Source: Statistical Bulletin of the Metropolitan Life Insurance Company. Compiled from various publications of the National Office of Vital Statistics and the Bureau of the Census.

Calendar period	Age							
	0	10	20	30	40	50	60	70
White Males								
1850*	38.3	48.0	40.1	34.0	27.9	21.6	15.6	10.2
1890*	42.50	48.45	40.66	34.05	27.37	20.72	14.73	9.35
1900-1902†	48.23	50.59	42.19	34.88	27.74	20.76	14.35	9.03
1901-1910†	49.32	50.86	42.39	34.80	27.55	20.59	14.17	8.96
1909-1911†	50.23	51.32	42.71	34.87	27.43	20.39	13.98	8.83
1919-1921†	56.34	54.15	45.60	37.65	29.86	22.22	15.25	9.51
1920-1929†	57.85	54.65	45.84	37.51	29.35	21.65	14.75	9.17
1929-1931	59.12	54.96	46.02	37.54	29.22	21.51	14.72	9.20
1930-1939	60.62	55.86	46.77	38.06	29.57	21.71	14.86	9.29
1939-1941	62.81	57.03	47.76	38.80	30.03	21.96	15.05	9.42
1949-1951	66.31	58.98	49.52	40.29	31.17	22.83	15.76	10.07
1958	67.2	59.5	50.0	40.7	31.5	22.9	15.7	10.1
White Females								
1850*	40.5	47.2	40.2	35.4	29.8	23.5	17.0	11.3
1890*	44.46	49.62	42.03	35.36	28.76	22.09	15.70	10.15
1900-1902†	51.08	52.15	43.77	36.42	29.17	21.89	15.23	9.59
1901-1910†	52.54	52.89	44.39	36.75	29.28	21.86	15.09	9.52
1909-1911†	53.62	53.57	44.88	36.96	29.26	21.74	14.92	9.38
1919-1921†	58.53	55.17	46.46	38.72	30.94	23.12	15.93	9.94
1920-1929†	60.62	56.41	47.46	39.20	30.97	22.97	15.70	9.71
1929-1931	62.67	57.65	48.52	39.99	31.52	23.41	16.05	9.98
1930-1939	64.52	58.98	49.71	40.90	32.24	23.96	16.44	10.19
1939-1941	67.29	60.85	51.38	42.21	33.25	24.72	17.00	10.50
1949-1951	72.03	64.26	54.56	45.00	35.64	26.76	18.64	11.68
1958	73.7	65.6	55.9	46.2	36.7	27.6	19.2	12.0
Nonwhite Males‡								
1900-1902†	32.54	41.90	35.11	29.25	23.12	17.34	12.62	8.33
1901-1910†	32.57	40.73	33.78	27.97	22.23	16.64	11.87	8.29
1909-1911†	34.05	40.65	33.46	27.33	21.57	16.21	11.67	8.00
1919-1921†	47.14	45.99	38.36	32.51	26.53	20.47	14.74	9.58
1920-1929†	46.90	44.86	36.76	30.65	24.55	18.83	13.66	9.12
1929-1931	47.55	44.27	35.95	29.45	23.36	17.92	13.15	8.78
1930-1939	50.06	46.56	38.05	31.11	24.65	18.98	14.13	9.53
1939-1941	52.26	48.34	39.52	32.05	25.06	19.06	14.37	10.11
1949-1951	58.91	52.96	43.73	35.31	27.29	20.25	14.91	10.74
1958	60.6	54.5	45.0	36.3	28.0	20.5	14.5	10.9
Nonwhite Females‡								
1900-1902†	35.04	43.02	36.89	30.70	24.37	18.67	13.60	9.62
1901-1910†	35.65	42.52	36.17	30.09	23.81	18.08	13.17	9.52
1909-1911†	37.67	42.84	36.14	29.61	23.34	17.65	12.78	9.22
1919-1921†	46.92	44.54	37.15	31.48	25.60	19.76	14.69	10.25
1920-1929†	47.95	44.86	36.98	30.93	24.67	18.85	14.01	10.01
1929-1931	49.51	45.33	37.22	30.67	24.30	18.60	14.22	10.38
1930-1939	52.62	48.29	39.90	32.88	26.11	20.09	15.28	10.88
1939-1941	55.56	50.75	42.04	34.40	27.19	20.95	16.10	11.82
1949-1951	62.70	56.17	46.77	38.02	29.82	22.67	16.95	12.29
1958	65.5	59.0	49.3	40.1	31.5	23.7	17.4	13.1

* Massachusetts only; white and nonwhite combined, the latter being about one percent of the total. † Death Registration States. ‡ Death Registration States of 1920. § Data for periods 1900-1902 to 1920-1921 relate to Negroes only.

Expectation of Life by Age and Sex; Selected Countries

Source: Statistical Office of the United Nations.

Country	Period	Average future lifetime in years at stated age											
		Males						Females					
		0	1	10	20	40	60	0	1	10	20	40	60
	1957	66.3	67.3	58.8	49.3	31.0	15.6	72.5	73.3	64.7	55.0	36.0	19.0
	1950-52	66.3	68.3	60.2	50.8	32.5	16.5	70.8	72.3	64.0	54.4	35.6	18.6
	1940	37.9	44.4	45.4	37.6	24.8	13.4	39.8	46.2	47.9	40.0	26.6	13.5
	1939-41	45.1	50.4	48.6	40.1	30.1	17.0	46.9	51.5	50.0	41.8	32.4	19.3
	1952	49.8	56.8	51.4	42.7	27.3	14.0	53.9	60.6	55.7	47.1	31.3	16.4
	1941-42	45.8	51.2	48.2	39.9	26.2	14.0	47.6	52.5	49.7	41.6	28.5	15.8
	1949-51	61.9	65.9	58.0	48.7	30.7	15.1	67.0	70.1	62.2	52.6	34.2	17.3
	1946-49	62.0	65.3	57.4	48.0	30.6	15.5	67.3	69.7	61.7	52.3	34.2	17.5
India	1958	67.2	68.5	60.1	50.6	32.1	15.8	72.3	73.2	64.6	54.9	35.8	18.2
	1951-55	69.9	71.2	62.7	53.1	34.4	17.5	72.6	73.4	64.8	55.0	35.9	18.4
Wales	1958	68.0	68.7	60.1	50.5	31.5	15.1	73.7	74.2	65.5	55.7	36.5	18.9
	1951-55	63.4	64.7	56.5	47.0	29.2	14.1	69.8	70.9	62.5	52.8	34.2	16.9
	1952-56	65.0	66.8	58.5	48.9	30.7	15.2	71.2	72.4	64.1	54.4	35.6	18.5
United Rep.)	1949-51	64.6	67.8	59.8	50.3	32.3	16.2	68.5	71.0	62.8	53.2	34.7	17.5
	1926-30	49.1	53.2	52.4	44.3	29.8	16.0	50.9	55.1	54.5	46.4	32.4	17.5
	1955	64.5	68.3	60.1	50.6	32.3	15.9	68.9	71.4	63.2	53.5	34.7	17.5
	1941-50	66.1	67.4	59.5	50.5	34.3	18.2	70.3	71.3	63.2	54.0	36.5	19.6
	1950-52	64.5	66.9	58.8	49.3	31.3	15.4	67.1	68.8	60.6	51.2	33.3	16.8
	1954-57	65.8	68.5	60.5	51.0	32.5	16.2	70.0	72.4	64.4	54.7	35.8	18.2
	1953-55	71.0	71.8	63.4	53.7	34.8	17.8	73.9	74.3	65.7	56.0	36.7	18.9
	1951-55	71.1	72.0	63.7	54.1	35.5	18.5	74.7	75.2	66.7	57.0	37.8	19.9
	1957	61.9	66.4	58.5	49.1	31.1	15.3	68.0	71.8	63.8	54.2	35.6	18.5
	1957-58	59.8	64.9	58.9	49.4	31.4	15.4	65.0	69.7	63.7	54.1	35.5	18.1
	1959	66.0	67.2	58.7	49.0	30.1	14.2	71.4	72.2	63.6	53.8	34.7	17.6
	1950	58.8	63.1	56.5	47.5	36.7	15.2	63.5	67.6	61.2	52.0	34.6	17.7
	1951-55	70.5	71.1	62.7	53.1	34.4	17.4	73.4	73.7	65.1	55.4	36.2	18.6
	1948-53	66.4	67.8	59.6	50.2	31.9	15.7	70.9	71.1	63.6	53.9	35.0	17.8
Italy	1955-56	63	*	*	*	*	*	69	*	*	*	*	*
	1936-41	41.1	47.6	45.6	37.2	22.7	11.3	45.7	51.5	50.8	42.4	27.7	14.2
	1941-50	32.5	39.0	39.0	33.0	20.5	10.1	31.7	37.3	39.5	32.9	21.1	11.3
	1958	69.5	70.8	62.4	52.9	34.0	16.6	72.5	73.6	65.4	55.3	36.2	18.8
	1958	65.0	66.5	58.7	49.2	31.3	15.3	69.6	71.0	63.1	53.5	35.2	18.4
	1938	47.2	51.1	49.9	41.6	26.2	12.8	50.6	54.5	53.2	45.1	30.0	14.8
	1947-48	48.7	52.0	47.9	39.8	25.6	12.7	51.9	55.2	50.9	42.7	28.4	14.2
	1936-38	35.7	42.1	46.9	39.8	26.1	13.3	41.5	48.1	54.5	46.1	30.8	16.3
U.S.A.	1945-47	63.8	65.5	57.7	48.4	30.4	15.3	68.3	69.6	61.7	52.3	34.1	18.0
	1953-55	67.1	67.9	59.5	50.1	31.7	15.5	72.8	73.2	64.8	55.1	36.0	18.8
	1950-52	68.3	69.0	60.6	51.2	32.7	16.2	72.4	72.9	64.4	54.6	35.6	18.5

Table. ¹ Provisional. ² Figures in 40 and 60 columns are for ages 35 and 55 respectively. ³ Excluding Dodecanese. ⁴ Japanese nationals only. ⁵ Data are for states of Uttar Pradesh, Bihar, Orissa, Madras, Mysore, Travancore-Cochin, Coorg, Bombay, Saurashtra, Kutch, Madhya Pradesh, Hyderabad, Bhopal and Vinhya Pradesh, comprising a population of 294,749,000 in 1951. ⁶ Excludes Alaska and Hawaii. ⁷ Unofficial estimate at 46,638 in June 1947.

Distribution of U. S. Population According to Size of Place, 1790 to 1950

Source: U. S. Bureau of the Census.

Census year	Total population	Population distribution (Total for year = 100%)					Number of urban places specified size		
		Total urban	Urban places of			Total rural	1,000,000 or more	100,000 to 1,000,000	Under 100,000
			1,000,000 or more	100,000 to 1,000,000	Under 100,000				
1790.....	3,929,214	5.1	—	—	5.1	94.9	—	—	—
1800.....	5,308,483	6.1	—	—	6.1	93.9	—	—	—
1810.....	7,239,881	7.3	—	—	7.3	92.7	—	—	—
1820.....	9,638,453	7.2	—	1.3	5.9	92.8	—	1	—
1830.....	12,866,020	8.8	—	1.6	7.2	91.2	—	1	—
1840.....	17,069,453	10.8	—	3.0	7.8	89.2	—	3	—
1850.....	23,191,876	15.3	—	5.1	10.2	84.7	—	6	—
1860.....	31,443,321	19.8	—	8.4	11.4	80.2	—	9	—
1870.....	38,558,371	25.7	—	10.7	15.0	74.3	—	14	—
1880.....	50,155,783	28.2	2.4	10.0	15.8	71.8	1	19	—
1890.....	62,947,714	35.1	5.8	9.6	19.7	64.9	3	25	—
1900.....	75,994,575	39.7	8.5	10.2	21.0	60.3	3	35	—
1910.....	91,972,266	45.7	9.2	12.9	23.6	54.3	3	47	—
1920.....	105,710,620	51.2	9.6	16.3	25.3	48.8	3	65	—
1930.....	122,775,046	56.2	12.3	17.3	26.6	43.8	5	88	—
1940.....	131,669,275	56.5	12.1	16.8	27.6	43.5	5	87	—
1950*.....	150,697,361	59.0	11.5	18.0	29.5	41.0	5	102	—
1950†.....	150,697,361	64.0	11.5	17.9	34.6	36.0	5	101	—

* Old urban definition. † New urban definition.

Complete reports of 1960 census not available on time for this edition.

White and Negro Population by State, 1950 Census

Source: U. S. Bureau of the Census.

State	White	Negro	Other	State	White	Negro	Other
Alabama.....	2,079,591	979,617	2,535	Nebraska.....	1,301,328	19,234	4,302
Arizona.....	654,511	25,974	69,102	Nevada.....	149,908	4,302	—
Arkansas.....	1,481,507	426,639	1,365	New Hampshire.....	532,275	731	—
California.....	9,915,173	462,172	208,878	New Jersey.....	4,511,585	318,565	—
Colorado.....	1,296,653	20,177	8,259	New Mexico.....	630,211	8,408	—
Connecticut.....	1,952,329	53,472	1,479	New York.....	13,872,095	918,191	—
Delaware.....	273,878	43,598	609	North Carolina.....	2,983,121	1,047,353	—
D. C.....	517,865	280,803	3,510	North Dakota.....	608,448	257	—
Florida.....	2,166,051	603,101	2,153	Ohio.....	7,428,222	513,072	—
Georgia.....	2,380,577	1,062,762	1,239	Oklahoma.....	2,032,526	145,503	—
Idaho.....	581,395	1,050	6,192	Oregon.....	1,497,128	11,529	—
Illinois.....	8,046,058	645,980	20,138	Pennsylvania.....	9,853,848	638,485	—
Indiana.....	3,758,512	174,168	1,544	Rhode Island.....	777,015	13,903	—
Iowa.....	2,599,546	19,692	1,835	South Carolina.....	1,293,405	822,077	—
Kansas.....	1,828,961	73,158	3,180	South Dakota.....	628,504	727	—
Kentucky.....	2,742,090	201,921	795	Tennessee.....	2,760,257	530,603	—
Louisiana.....	1,796,683	882,428	4,405	Texas.....	6,726,534	977,458	—
Maine.....	910,846	1,221	1,707	Utah.....	676,909	2,729	—
Maryland.....	1,954,975	385,972	2,054	Vermont.....	377,188	443	—
Massachusetts.....	4,611,503	73,171	5,840	Virginia.....	2,581,555	734,211	—
Michigan.....	5,917,825	442,296	11,645	Washington.....	2,316,496	30,691	—
Minnesota.....	2,953,697	14,022	14,764	West Virginia.....	1,890,282	114,867	—
Mississippi.....	1,188,632	986,494	3,788	Wisconsin.....	3,392,690	28,182	—
Missouri.....	3,655,593	297,088	1,972	Wyoming.....	284,009	2,557	—
Montana.....	572,038	1,232	17,754	TOTAL U. S.....	134,942,028	15,042,286	—

Distribution of U. S. Population by Race, 1850-1950

S. Bureau of the Census. Complete reports of 1960 census not available on time for this edition.

	White	Nonwhite					Total Nonwhite
		Negro	Indian	Japanese	Chinese	All other	
.....	19,553,068	3,638,808	.....	.....	.....	.....	3,638,808
.....	26,922,537	4,441,830	44,021	.....	34,933	.....	4,520,784
.....	33,589,377	4,880,009	25,731	55	63,199	.....	4,968,994
.....	43,402,970	6,580,793	66,407	148	105,465	.....	6,752,813
.....	55,101,258	7,488,676	248,253	2,039	107,488	.....	7,846,456
.....	66,809,196	8,833,994	237,196	24,326	89,863	.....	9,185,379
.....	81,731,957	9,827,763	265,683	72,157	71,531	3,175	10,240,309
.....	94,820,915	10,463,131	244,437	111,010	61,639	9,488	10,889,705
.....	110,286,740	11,891,143	332,397	138,834	74,954	50,978	12,488,306
.....	118,214,870	12,865,518	333,969	126,947	77,504	50,467	13,454,405
.....	134,942,028	15,042,286	343,410	141,768	117,629	110,240	15,755,333
.....	86,756,435	9,392,608	56,108	100,735	109,434	52,366	9,711,251
arm.....	28,470,339	2,491,377	178,678	14,260	5,844	20,827	2,710,986
.....	19,715,254	3,158,301	108,624	26,773	2,351	37,047	3,333,096

United States Population Distribution by Age, Race, Nativity and Sex, 1850-1959

Source: Mortimer Spiegelman, Introduction to Demography, and Bureau of Census

Total	Age					Race and Nativity			
	Under 5	5-19	20-44	45-64	65 and over	White			Nonwhite
						Total	Native born	Foreign born	
Per cent distribution									
100.0	15.1	37.4	35.1	9.8	2.6	84.3	74.6	9.7	15.7
100.0	15.4	35.8	35.7	10.4	2.7	85.6	72.6	13.0	14.4
100.0	14.3	35.4	35.4	11.9	3.0	87.1	72.9	14.2	12.9
100.0	13.8	34.3	35.9	12.6	3.4	86.5	73.4	13.1	13.5
100.0	12.2	33.9	36.9	13.1	3.9	87.5	73.0	14.5	12.5
100.0	12.1	32.3	37.8	13.7	4.1	87.9	74.5	13.4	12.1
100.0	11.6	30.4	39.1	14.6	4.3	88.9	74.4	14.5	11.1
100.0	11.0	29.8	38.4	16.1	4.7	89.7	76.7	13.0	10.3
100.0	9.3	29.5	38.3	17.5	5.4	89.8	78.4	11.4	10.2
100.0	8.0	26.4	38.9	19.8	6.9	89.8	81.1	8.7	10.2
100.0	10.7	23.2	37.7	20.3	8.1	89.5	82.8	6.7	10.5
100.0	11.2	27.2	32.7	20.2	8.7	88.8	¶	¶	11.2
Males per 100 females									
104.3	102.4	100.9	108.1	106.4	101.3	105.2	103.1	123.8	99.1
104.7	102.4	101.2	107.9	111.5	98.3	105.3	103.7	115.1	101.2
102.2	102.9	101.2	99.2	114.5	100.5	102.8	100.6	115.3	98.4
103.6	103.0	101.3	104.0	110.2	101.4	104.0	102.1	115.9	100.7
105.0	103.6	101.4	107.3	108.3	104.2	105.4	102.9	118.7	102.2
104.4	102.1	100.9	105.8	110.7	102.0	104.9	102.8	117.4	101.0
106.0	102.5	101.3	108.1	114.4	101.1	106.6	102.7	129.2	101.3
104.0	102.5	100.8	102.8	115.2	101.3	104.4	101.7	121.7	100.9
102.5	103.0	101.4	100.5	109.1	100.5	102.9	101.1	115.8	99.1
100.7	103.2	102.0	98.1	105.2	95.5	101.2	100.1	111.1	96.7
99.0	103.9	102.9	97.0	100.2	89.6	99.4	99.0	103.9	96.2
98.0	103.8	104.0	97.8	94.5	82.8	98.3	¶	¶	95.6

nonwhite races other than Negro. † Excludes Indians in Indian Territory and on Indian reservations. Figures exclude all persons residing on Indian reservations, whether white or nonwhite; these persons are by race and nativity distributions. § Includes armed forces overseas and other persons abroad. * Not NOTE: For 1850 and 1860, the data in the census reports at ages 40-49 and 60-69 are published in 10-upings; these were subdivided into 5-year age groupings by the author.

U. S. Population by Age, Sex and Race, July 1, 1959

Source: U. S. Bureau of the Census.

Age	White		Nonwhite		Total	
	Male	Female	Male	Female	Male	Female
Under 5 years.....	8,639,000	8,285,000	1,443,000	1,429,000	10,081,000	9,714,000
Under 1 year.....	1,650,000	1,586,000	279,000	278,000	1,930,000	1,864,000
1 and 2 years.....	3,503,000	3,360,000	589,000	581,000	4,092,000	3,941,000
3 and 4 years.....	3,485,000	3,339,000	574,000	569,000	4,059,000	3,908,000
5 to 9 years.....	8,240,000	7,855,000	1,310,000	1,296,000	9,550,000	9,151,000
10 to 14 years.....	7,354,000	7,011,000	1,037,000	1,029,000	8,391,000	8,040,000
15 to 19 years.....	5,794,000	5,594,000	781,000	787,000	6,575,000	6,381,000
20 to 24 years.....	4,932,000	4,835,000	694,000	701,000	5,626,000	5,536,000
25 to 29 years.....	4,886,000	4,861,000	620,000	671,000	5,506,000	5,532,000
30 to 34 years.....	5,293,000	5,402,000	605,000	704,000	5,898,000	6,106,000
35 to 39 years.....	5,451,000	5,641,000	600,000	670,000	6,052,000	6,311,000
40 to 44 years.....	5,066,000	5,249,000	516,000	589,000	5,582,000	5,830,000
45 to 49 years.....	4,820,000	5,004,000	515,000	579,000	5,334,000	5,583,000
50 to 54 years.....	4,260,000	4,428,000	432,000	457,000	4,692,000	4,885,000
55 to 59 years.....	3,631,000	3,854,000	361,000	380,000	3,991,000	4,234,000
60 to 64 years.....	3,132,000	3,444,000	273,000	284,000	3,405,000	3,728,000
65 to 69 years.....	2,511,000	2,844,000	187,000	204,000	2,698,000	3,047,000
70 to 74 years.....	1,842,000	2,176,000	127,000	138,000	1,969,000	2,314,000
75 to 79 years.....	1,206,000	1,573,000	90,000	105,000	1,295,000	1,678,000
80 to 84 years.....	594,000	817,000	50,000	58,000	645,000	875,000
85 years and over.....	319,000	449,000	41,000	50,000	359,000	499,000
All ages.....	77,969,000	79,321,000	9,682,000	10,131,000	87,651,000	89,452,000
5 years.....	1,724,000	1,642,000	282,000	280,000	2,006,000	1,922,000
6 to 13 years.....	12,643,000	12,049,000	1,894,000	1,874,000	14,537,000	13,923,000
14 to 17 years.....	4,931,000	4,744,000	656,000	660,000	5,587,000	5,403,000
18 to 21 years.....	4,123,000	4,002,000	586,000	588,000	4,709,000	4,590,000
14 years and over.....	54,964,000	57,345,000	6,063,000	6,549,000	61,026,000	63,894,000
18 years and over.....	50,032,000	52,602,000	5,407,000	5,889,000	55,439,000	58,491,000
21 years and over.....	46,917,000	49,582,000	4,965,000	5,444,000	51,882,000	55,026,000
65 years and over.....	6,472,000	7,858,000	495,000	555,000	6,967,000	8,413,000
Median age, years.....	29.1	31.1	21.9	23.7	28.3	30

NOTE: Data relate to the total population of the continental United States, including the armed forces overseas.

Immigrants and Emigrants; United States, 1911-1959

Source: U. S. Immigration and Naturalization Service and U. S. Bureau of the Census.

Period*	Immigrants	Emigrants	Excess of immigrants over emigrants	Period*	Immigrants	Emigrants	Excess of immigrants over emigrants
1911-15.....	4,459,831	1,444,530	3,015,301	1941-45.....	170,952	42,696	128,256
1916-20.....	1,275,980	702,464	573,516	1946-50.....	864,087	113,703	750,384
1921-25.....	2,638,913	697,397	1,941,516	1951-55.....	1,087,638	134,220	953,418
1926-30.....	1,468,296	347,679	1,120,617	1956-57.....	648,492	46,757	601,735
1931-35.....	220,209	323,863	-103,654	1957-58.....	253,265	(†)	253,265
1936-40.....	308,222	135,875	172,347	1958-59.....	260,686	(†)	260,686

* Fiscal years ending June 30. † Not available.

Persons Naturalized Since 1907

Source: U. S. Immigration and Naturalization Service.

Period*	Civilian	Military	Total	Period*	Civilian	Military	Total
1907-10.....	111,738		111,738	1954.....	104,086	13,745	117,831
1911-20.....	884,672	244,300	1,128,972	1955.....	197,568	11,958	209,526
1921-30.....	1,716,979	56,206	1,773,185	1956.....	138,681	7,204	145,885
1931-40.....	1,498,573	19,891	1,518,464	1957.....	137,198	845	138,043
1941-50.....	1,837,229	149,799	1,987,028	1958.....	118,950	916	119,866
1951.....	53,741	975	54,716	1959.....	102,623	1,308	103,931
1952.....	87,070	1,585	88,655	1907-59.....	7,079,584	510,307	7,589,891

* Fiscal years ending June 30.

Immigration by Country of Origin, 1820 to 1959

Source: Immigration and Naturalization Service.

are totals, not annual averages, and were tabulated as follows: 1820-67, alien passengers arrived; 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted. 1906 relate to country whence alien came; since 1906, to country of last permanent residence.)

les	1820-1910	1911-1920	1921-1930	1931-1940	1941-1950	1951-1959	1820-1959
nia ¹	3,172,461	453,649	32,868	3,563	24,860	64,887	3,752,288
	103,796	33,746	15,846	4,817	12,189	17,456	187,850
	39,440	22,533	2,945	938	375	84	66,315
ukia ¹	258,053	41,983	32,430	2,559	5,393	9,824	350,242
			1,576	506	212	159	2,453
		756	16,691	2,146	2,503	4,417	26,513
	470,868	61,897	49,610	12,623	38,809	45,683	679,490
	5,351,746	143,945	412,202	114,058	226,578	448,313	6,696,842
n: England	2,212,071	249,944	157,420	21,756	112,252	140,113	2,893,556
	488,749	78,357	159,781	6,887	16,131	29,192	779,097
	59,540	13,107	13,012	735	3,209	2,342	91,945
fied ⁴	793,741					3,675	797,416
	186,204	184,201	51,084	9,119	8,973	43,974	483,555
		442,693	30,680	7,861	3,469	31,471	516,174
	4,212,169	146,181	220,591	13,167	26,967	50,414	4,669,489
	3,086,356	1,109,524	455,315	68,028	57,661	172,122	4,949,006
			3,399	1,192	361	288	5,240
			6,015	2,201	683	165	9,064
			727	565	820	613	2,725
s.	175,943	43,718	26,948	7,150	14,860	43,623	312,242
	665,189	66,395	68,531	4,740	10,100	20,544	835,499
	165,182	4,813	227,734	17,026	7,571	5,769	428,095
	132,989	89,732	29,994	3,329	7,423	12,822	276,289
	72,117	13,311	67,646	3,871	1,076	759	158,780
	69,296	68,611	28,958	3,258	2,898	6,497	179,518
	1,021,165	95,074	97,249	3,960	10,665	19,235	1,247,348
	237,401	23,091	29,676	5,512	10,547	15,723	321,950
urope.	85,800	54,677	14,659	737	580	2,192	158,645
	2,359,048	921,201	61,742	1,356	548	403	3,344,298
		1,888	49,064	5,835	1,576	6,777	65,140
e.	2,605	8,111	9,603	2,361	3,983	7,855	34,518
	25,421,929	4,376,564	2,477,853	348,289	621,704	1,208,115	34,454,454
	326,060	21,278	29,907	4,928	16,709	8,277	407,159
	5,409	2,082	1,886	496	1,761	1,729	13,363
	158,344	83,837	33,462	1,948	1,555	40,551	319,697
sia ¹⁰	106,481	79,389	19,165	328	218	666	206,247
	16,942	5,973	12,980	7,644	11,537	74,626	129,702
	613,236	192,559	97,400	15,344	31,780	125,849	1,076,168
ada & Newfoundland ¹¹	1,230,501	742,185	924,515	108,527	171,718	331,284	3,508,730
erica.	10,365	17,159	15,769	5,861	21,665	38,032	108,851
	77,645	219,004	459,287	22,319	60,589	267,103	1,105,947
ica.	29,385	41,899	42,215	7,803	21,831	75,134	218,267
	233,146	123,424	74,899	15,502	49,725	109,455	606,151
ica ¹⁸			31	25	29,276	56,411	85,743
	1,581,042	1,143,671	1,516,716	160,037	354,804	877,419	5,633,689
	9,581	8,443	6,286	1,750	7,367	12,167	45,594
ew Zealand	31,654	12,348	8,299	2,231	13,805	9,614	77,951
	8,859	1,079	427	780	5,437	4,450	21,032
pecified.	252,691 ¹⁴	1,147	228	.....	142	12,467	266,675
ries.	27,918,992	5,735,811	4,107,209	528,431	1,035,039	2,250,081	41,575,563

established since beginning of World War I are theretofore included with countries to which they be-
 ata for Austria-Hungary not reported until 1861. Austria and Hungary recorded separately after 1905.
 ded with Germany 1938-45. ³ Bulgaria, Serbia, Montenegro first reported in 1899. Bulgaria reported
 since 1920. In 1920, separate enumeration for Kingdom of Serbs, Croats, Slovenes; since 1922, recorded as
⁴ United Kingdom not specified; for 1901-51, included in "Other Europe." ⁵ Norway included with
 -68. ⁶ Included with Austria-Hungary, Germany and Russia 1899-1919. ⁷ No record of immigration
 Since 1931, U.S.S.R. has been broken down into European Russia and Siberia or Asiatic Russia. ⁸ No
 migration until 1861. ⁹ No record of immigration until 1869. ¹⁰ Includes all British North American
 1820-98. ¹¹ No record of immigration 1886-93. ¹² Included with "Countries not specified" prior to
 udes 32,897 persons returning in 1906 to their homes in U. S. ¹³ From 1952, Asia included Philippines.
 1, Philippines included in Pacific Islands; before 1934, recorded in separate tables as insular travel.

The Working Population of the U. S., 1820-1950*

Source: U. S. Bureau of the Census.

Year	Working population		Per cent of working population in		Year	Working population		Per cent of working population in	
	Number (thousands)	Per cent of total population ages 10 and over ¹	Farm occupation	Nonfarm occupation		Number (thousands)	Per cent of total population ages 10 and over ¹	Farm occupation	Nonfarm occupation
1820.....	2,881	44.4	71.8	28.2	1890.....	23,318	49.2	42.6	57.4
1830.....	3,932	45.5	70.5	29.5	1900.....	29,073	50.2	37.5	62.5
1840.....	5,420	46.6	68.6	31.4	1910.....	37,371	52.2	31.0	69.0
1850.....	7,697	46.8	63.7	36.3	1920.....	42,434	51.3	27.0	73.0
1860.....	10,533	47.0	58.9	41.1	1930.....	48,830	49.5	21.4	78.6
1870.....	12,925	44.4	53.0	47.0	1940.....	52,789	52.2	16.1	83.9
1880.....	17,392	47.3	49.4	50.6	1950.....	60,054	53.5	11.6	88.4

* For 1820 to 1930, the data relate to the population and gainful workers at ages 10 and over. For 1940 and the data relate to the population and labor force at ages 14 and over; the farm and nonfarm percentages relate to the experienced labor force.

Experienced Civilian Labor Force, 1950 in Thousands*

Source: U. S. Department of Commerce.

Total, 14 years & over.....	58,999	Farmers & farm managers.....	
Professional, technical & kindred workers.....	4,988	Managers, officials & proprietors, excl. farm.....	
Accountants & auditors.....	383	Clerical & kindred workers.....	
Actors & actresses.....	18	Bookkeepers.....	
Airplane pilots & navigators.....	14	Cashiers.....	
Architects.....	25	Stenographers, typists & secretaries.....	
Artists & art teachers.....	81	Sales workers.....	
Authors, editors & reporters.....	108	Insurance agents & brokers.....	
Chemists.....	76	Sales & sales clerks.....	
Chiropractors.....	13	Craftsmen, foremen & kindred workers.....	
Clergymen.....	168	Carpenters.....	
College presidents, professors, instructors.....	126	Electricians.....	
Dancers & dancing teachers.....	17	Foremen, not elsewhere classified.....	
Dentists.....	75	Machinists.....	
Draftsmen.....	125	Mechanics & repairmen.....	
Engineers, technical.....	534	Painters, construction & maintenance.....	
Lawyers & judges.....	181	Operators & kindred workers.....	
Librarians.....	56	Private household workers.....	
Musicians & music teachers.....	161	Service workers, except private household.....	
Nurses, professional.....	404	Barbers, beauticians & machinists.....	
Optometrists.....	15	Bartenders.....	
Osteopaths.....	5	Boarding & lodging house keepers.....	
Pharmacists.....	89	Charwomen & cleaners.....	
Photographers.....	55	Cooks, except private household.....	
Physicians & surgeons.....	192	Elevator operators.....	
Radio operators.....	16	Practical nurses.....	
Religious workers.....	42	Waiters & waitresses.....	
Social & welfare workers, except group.....	76	Farm laborers & foremen.....	
Surveyors.....	28	Laborers, except farm & mine.....	
Veterinarians.....	13	Occupation not reported.....	

Indian Population Residing on Reservations Under Agency Control

(Top 16 agencies by population, 1950)*

Source: Bureau of Indian Affairs.

Five Civilized Tribes Agency (Okla.).....	37,382	Pima Agency (Ariz.).....	
Navajo Agency & Reservation (Ariz.).....	32,838	Rosebud Agency (S. Dak.).....	
Navajo Agency & Reservation (N. Mex.).....	20,714	Turtle Mountain Agency (N. Dak.).....	
Southern Plains Agency (Okla.).....	14,841	Papago Agency (Ariz.).....	
United Pueblo Agency (N. Mex.).....	12,935	Hope Agency & Reservation (Ariz.).....	
California Agency (Calif.).....	10,000	Great Lakes Agency (Wis.).....	
Pine Ridge Agency & Reservation (S. Dak.).....	6,636	Blackfeet Agency & Reservation (Mont.).....	
Consolidated Chippewa Agency (Minn.).....	6,376	San Carlos Agency & Reservation (Ariz.).....	

* Complete reports of 1960 census not available on time for this edition.

Population in the Working Population of the U. S., 1870-1950

Source: U. S. Bureau of the Census.

Working women*		
Number (thousands)	Per cent of female population ages 10 and over*	Per cent of total working population ages 10 and over*
1,917	13.3	14.8
2,647	14.7	15.2
4,006	17.4	17.2
5,319	18.8	18.3
7,445	21.5	19.9
8,637	21.4	20.4
10,752	22.0	22.0
12,845	25.4	24.3
16,501	28.9	27.5

* To 1930, the data relate to the population of workers at ages 10 and over; for 1940 and later, the data relate to the population and labor force at ages 16 and over. Data for 1960 not yet complete.

Percent Unemployed in the Civilian Labor Force, 1929-59

Source: U. S. Bureau of Labor Statistics.

Year	Per cent unemployed	Year	Per cent unemployed
1929.....	3.2	1944.....	1.2
1930.....	8.7	1945.....	1.9
1931.....	15.9	1946.....	3.9
1932.....	23.6	1947.....	3.6
1933.....	24.9	1948.....	3.4
1934.....	21.7	1949.....	5.5
1935.....	20.1	1950.....	5.0
1936.....	16.9	1951.....	3.0
1937.....	14.3	1952.....	2.7
1938.....	19.0	1953.....	2.5
1939.....	17.2	1954.....	5.0
1940.....	14.6	1955.....	4.0
1941.....	9.9	1956.....	3.8
1942.....	4.7	1957.....	4.3
1943.....	1.9	1958.....	6.8
		1959.....	5.5

NOTE: These estimates since 1940 are derived from sample surveys and are subject to sampling variations.

MARRIAGE AND DIVORCE

Marriages and Divorces in the United States, 1890-1959

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Marriage		Divorce ²		Year	Marriage		Divorce ²	
Number	Rate ¹	Number	Rate ¹		Number	Rate ¹	Number	Rate ¹
570,000	9.0	33,461	.5	1931.....	1,060,914	8.6	188,003	1.5
620,000	8.9	40,387	.6	1932.....	981,903	7.9	164,241	1.3
709,000	9.3	55,751	.7	1933.....	1,098,000	8.7	165,000	1.3
842,000	10.0	67,976	.8	1934.....	1,302,000	10.3	204,000	1.6
895,000	10.5	72,062	.8	1935.....	1,327,000	10.4	218,000	1.7
936,936	10.8	76,571	.9	1936.....	1,369,000	10.7	236,000	1.8
857,461	9.7	76,852	.9	1937.....	1,451,296	11.3	249,000	1.9
897,354	9.9	79,671	.9	1938.....	1,330,780	10.3	244,000	1.9
948,166	10.3	83,045	.9	1939.....	1,403,633	10.7	251,000	1.9
955,287	10.2	89,219	1.0	1940.....	1,595,879	12.1	264,000	2.0
1,004,602	10.5	94,318	1.0	1941.....	1,695,999	12.7	293,000	2.2
1,021,398	10.5	91,307	.9	1942.....	1,772,132	13.2	321,000	2.4
1,025,092	10.3	100,584	1.0	1943.....	1,577,050	11.7	359,000	2.6
1,007,595	10.0	104,298	1.0	1944.....	1,452,394	10.9	400,000	2.9
1,075,775	10.6	114,000	1.1	1945.....	1,612,992	12.2	485,000	3.5
1,144,200	11.1	121,564	1.2	1946.....	2,291,045	16.4	610,000	4.3
1,000,109	9.7	116,254	1.1	1947.....	1,991,878	13.9	483,000	3.4
1,150,186	11.0	141,527	1.3	1948.....	1,811,155	12.4	408,000	2.8
1,274,476	12.0	170,505	1.6	1949.....	1,579,798	10.6	397,000	2.7
1,163,863	10.7	159,580	1.5	1950.....	1,667,231	11.1	385,144	2.6
1,134,151	10.3	148,815	1.4	1951.....	1,594,694	10.4	381,000	2.5
1,229,784	11.0	165,096	1.5	1952.....	1,539,318	9.9	392,000	2.5
1,184,574	10.4	170,952	1.5	1953.....	1,546,000	9.8	390,000	2.5
1,188,334	10.3	175,449	1.5	1954.....	1,490,000	9.2	379,000	2.4
1,202,574	10.2	184,678	1.6	1955.....	1,531,000	9.3	377,000	2.3
1,201,053	10.1	196,292	1.6	1956.....	1,585,000	9.5	382,000	2.3
1,182,497	9.8	200,176	1.7	1957.....	1,518,000	8.9	381,000	2.2
1,232,559	10.1	205,876	1.7	1958.....	1,451,000	8.4	368,000	2.1
1,126,856	9.2	195,961	1.6	1959 ³	1,494,000	8.5	396,000	2.2

¹ Population. Divorce rates for 1917-19 and 1941-46 are based on population including armed forces. Marriage rates are based on population excluding armed forces overseas. ² Includes annulments. ³ Proportions for Alaska. NOTE: Figures for marriages for all years include partial or complete estimates for some years. Divorce rates for 1900, 1905 and 1922-32 are estimated, except for 1900, 1905 and 1922-32.

Marital Status of the Population, 1950

Source: U. S. Bureau of the Census. Complete reports of 1960 census not available on time for this edition.

State and Census division	Males				Females			
	Population 14 yrs. old & over	% distribution*			Population 14 yrs. old & over	% distribution*		
		Single	Married	Widowed or divorced		Single	Married	Widowed or divorced
Alabama.....	1,024,915	26.03	69.10	4.87	1,093,798	19.51	66.21	14.28
Arizona.....	263,546	25.84	67.38	6.78	259,511	18.36	68.05	13.59
Arkansas.....	659,656	24.09	69.76	6.15	675,397	16.84	68.74	14.42
California.....	4,034,180	24.37	68.25	7.38	4,073,341	15.88	67.00	17.12
Colorado.....	489,263	25.76	67.60	6.64	490,550	18.23	67.03	14.74
Connecticut.....	756,080	27.34	66.89	5.77	797,537	23.28	63.74	12.98
Delaware.....	117,542	25.45	68.52	6.03	122,763	20.46	65.96	13.58
D. C.....	301,111	29.58	64.01	6.41	347,872	26.99	56.71	16.30
Florida.....	1,018,121	22.69	70.53	6.78	1,065,169	15.37	67.86	16.77
Georgia.....	1,168,086	26.29	68.86	4.85	1,247,615	18.84	66.03	15.13
Idaho.....	213,170	25.26	68.33	6.41	198,781	16.10	72.69	11.21
Illinois.....	3,309,125	25.56	67.73	6.71	3,418,775	19.74	65.57	14.69
Indiana.....	1,448,831	23.12	70.03	6.85	1,486,515	17.53	68.10	14.37
Iowa.....	968,920	25.55	68.17	6.28	985,169	19.54	66.95	13.51
Kansas.....	712,198	24.44	69.26	6.30	720,732	17.72	68.10	14.18
Kentucky.....	1,039,654	27.16	66.95	5.89	1,048,459	19.96	66.32	13.72
Louisiana.....	914,015	25.86	68.93	5.21	968,553	19.14	66.43	14.43
Maine.....	331,780	27.03	65.50	7.47	342,686	21.67	63.57	14.76
Maryland.....	863,852	26.31	68.01	5.68	884,036	20.09	66.40	13.51
Massachusetts.....	1,733,192	29.58	64.04	6.38	1,905,814	27.01	58.64	14.35
Michigan.....	2,368,024	25.13	68.41	6.46	2,349,955	18.74	68.55	12.71
Minnesota.....	1,101,812	29.56	64.79	5.65	1,099,128	22.73	64.85	12.42
Mississippi.....	723,522	26.45	68.55	5.00	757,568	18.71	67.27	14.02
Missouri.....	1,466,440	23.74	69.24	7.02	1,556,891	18.64	65.64	15.72
Montana.....	227,271	28.98	63.45	7.57	202,470	17.13	69.98	12.89
Nebraska.....	498,732	26.94	67.02	6.04	497,059	19.87	67.05	13.08
Nevada.....	64,807	25.18	65.45	9.37	55,791	12.94	72.64	14.42
New Hampshire.....	197,099	26.90	65.67	7.43	207,945	22.53	62.57	14.90
New Jersey.....	1,838,965	26.34	68.08	5.58	1,931,114	21.35	65.19	13.46
New Mexico.....	233,244	28.32	66.09	5.59	223,050	20.16	68.56	11.28
New York.....	5,616,963	27.59	66.79	5.62	6,033,574	23.15	62.89	13.96
North Carolina.....	1,390,072	29.44	66.62	3.94	1,435,312	22.54	65.39	12.07
North Dakota.....	230,502	34.70	60.51	4.79	207,649	23.10	66.68	10.22
Ohio.....	2,935,808	23.52	69.45	7.03	3,060,868	19.07	66.48	14.45
Oklahoma.....	808,460	23.87	69.51	6.62	822,794	16.13	68.34	15.53
Oregon.....	576,808	22.86	69.60	7.54	561,087	15.14	70.82	14.04
Pennsylvania.....	3,904,893	27.64	66.18	6.18	4,108,599	23.29	63.38	13.33
Rhode Island.....	300,768	30.12	63.87	6.01	319,531	25.40	60.99	13.61
South Carolina.....	688,217	29.53	66.67	3.80	733,249	22.57	64.13	13.30
South Dakota.....	245,727	31.27	63.33	5.40	227,366	20.86	67.86	11.28
Tennessee.....	1,149,299	25.45	69.04	5.51	1,209,638	19.31	66.11	14.58
Texas.....	2,781,613	24.78	69.34	5.88	2,801,565	16.79	68.60	14.61
Utah.....	235,325	25.81	69.31	4.88	234,486	19.12	69.31	11.57
Vermont.....	136,311	28.62	64.42	6.96	141,356	22.89	62.23	14.88
Virginia.....	1,210,799	29.79	65.22	4.99	1,193,627	21.18	65.46	13.36
Washington.....	919,661	25.93	66.57	7.50	862,214	15.44	70.03	14.53
West Virginia.....	700,823	27.29	67.08	5.63	704,919	20.98	66.56	12.46
Wisconsin.....	1,278,770	27.97	65.84	6.19	1,279,013	21.77	65.72	12.51
Wyoming.....	113,645	28.98	64.35	6.67	96,526	15.52	73.30	11.18
New England.....	3,455,230	28.70	64.89	6.41	3,709,869	25.17	60.75	14.08
Middle Atlantic.....	11,360,821	27.40	66.79	5.81	12,073,287	22.91	63.43	13.66
East North Central.....	11,340,558	24.90	68.40	6.70	11,595,126	19.30	66.76	13.94
West North Central.....	5,224,331	26.54	67.23	6.23	5,293,994	19.92	66.32	13.76
South Atlantic.....	7,458,623	27.46	67.42	5.12	7,734,562	20.45	65.57	13.98
East South Central.....	3,937,390	26.23	68.42	5.35	4,109,463	19.42	66.40	14.18
West South Central.....	5,163,744	24.73	69.36	5.91	5,268,309	17.12	68.18	14.70
Mountain.....	1,840,271	26.62	66.89	6.49	1,761,165	17.93	69.17	12.90
Pacific.....	5,530,649	24.47	68.11	7.42	5,496,642	15.73	67.87	16.40
TOTAL U. S.....	55,311,617	26.25	67.62	6.13	57,042,417	20.08	65.75	14.17

* Total for ages 14 and over = 100%.

Marriage Information, by State

ces: Legal information, *Information Please Almanac* questionnaires to states; Marriage statistics, Public Health Service, U. S. Dept. of Health, Education and Welfare.

State	Legal minimum marriage age				Blood test required	Waiting period ¹		Marriages ²	
	With parental consent ³		Without parental consent			Before license	After license	1958	1959 ⁴
	M	F	M	F					
	17	14	21	18	yes	none	none	24,506	30,763
	18	16	21	18	yes	3 da.	none	1,616	1,746
	18	16	21	18	yes	none	none	9,805 ¹³	10,171
	18	16	21	18	yes	3 da.	none	15,333 ¹³	18,543
	18	16	21	18	yes	none	none	96,034	101,503
	16	16	21	18	yes	none	none	14,691 ¹⁴	15,497
	16	16	21	21	yes	4 da.	none	17,003	17,455
	18	16	21	18	yes	none	24 hr. ⁵	2,311	2,382
	18	16	21	18	no	3 da. ⁶	none	8,094 ¹⁴	8,377
	18	16	21	21	yes	3 da.	none	34,569	39,343
	17	14	21	21	yes	5 da. ⁷	none	47,219	48,689
	18	16	20	20	yes	3 da.	none	4,727	4,942
	15	15	18	18	yes	none	none	9,522	9,341
	18	16	21	18	yes	none	none	83,400	87,200
	18	16	21	18	yes	3 da.	none	38,949	42,028
	16	14	21	18	yes	none	none	23,958	25,202
	18	16	21	18	yes	3 da.	none	15,440	15,918
	18	16	21	21	yes	3 da.	none	26,204	27,530
	18	16	21	21	yes	none	72 hr.	21,068	22,829
	16	16	21	18	yes	5 da.	none	7,564	6,967
	18	16	21	18	no	48 hr.	none	39,926	41,493
	18	16	21	18	yes	3 da.	none	33,583	45,727
	18	16 ⁸	18	18	yes	3 da.	none	55,159	57,435
	16	15	18	16	no	5 da.	none	23,554	23,220
	17	15	21	18	yes	3 da.	none	36,402	20,404
	15	15	21	18	yes	3 da.	none	31,965 ¹⁸	35,858
	18	16	21	18	yes	none	none	6,142	6,231
	18	16	21	21	yes	none	none	10,607	10,818
	18	16	21	18	no	none	none	55,832 ¹⁴	60,361
	14	13	20	18	yes	5 da.	none	6,997	7,230
	18	16	21	18	yes	72 hr.	none	38,398	39,357
	18	16	21	18	yes	none	none	5,814 ¹⁸	5,657
	16	14 ⁹	21	18	yes	none	(¹⁰)	121,322	122,344
	16	16	18	18	yes	none ¹¹	none	27,266 ¹⁴	29,984
	18	15	21	18	yes	none	none	4,275	4,280
	18	16	21	21	yes	5 da.	none	65,240	66,748
	18	15	21	18	yes	none	none	33,466 ¹⁵	30,100
	18	15	21	18	yes	3 da.	none	9,896	10,190
	16	16	21	21	yes	3 da.	none	67,203	67,952
	18	16	21	21	yes	none ¹²	none	5,659	5,753
	18	14	18	18	no	24 hr.	none	37,856	39,629
	18	15	21	18	yes	none	none	5,702	5,885
	16 ¹⁶	16 ¹⁶	21	21	yes	3 da.	none	27,675	29,783
	16	14	21	18	yes	none	3 da.	89,821 ¹⁶	93,253
	16	14	21	18	yes	none	none	6,600	6,928
	18	16	21	18	yes	none	5 da.	3,371	3,315
	18	16	21	21	yes	none	none	36,326	38,044
	15	15	21	18	no	3 da.	none	27,961 ¹⁴	28,912
	18	16	21	21	yes	3 da	none	13,757	14,168
	18	16	21	18	yes	5 da.	none	24,985	25,733
	18	16	21	21	yes	none	none	2,955	3,044

states, waiting period may be waived or reduced by court order. ² By place of occurrence. ³ In most s younger than the age shown may be married by court permission. ⁴ Provisional figures; data represent orted for 28 states, Alaska, and Hawaii; marriage intentions filed for 1 state; and marriage licenses aining states. ⁵ 96 hours if nonresidents. ⁶ Day of application and day of pickup not included in 3-day d. ⁷ If parties cannot establish they are of legal marriage age. ⁸ Consent of one parent or guardian female only. ⁹ Females 14 to 16 years old must also have consent of judge of Children's Court. ¹⁰ Mar- e solemnized within 2 days from date on which specimen was taken for serological test, and not until r issuance of marriage license. Waiting period may be waived by court order. ¹¹ Except in Pamlico hours. ¹² 5-day waiting period if woman is nonresident. ¹³ Data incomplete. ¹⁴ Marriage licenses. ated. ¹⁵ Parent must appear in person or provide doctor's affidavit of illness.

Grounds for Divorce

Source: Information Please Almanac questionnaires to the states.

State	Adultery	Cruelty	Desertion	Alcoholism	Impotence	Felony conviction	Neglect to provide	Insanity	Pregnancy at marriage	Bigamy	Separation	Indignities	Drug addiction	Violence	Fraudulent contract
Alabama.....	yes	yes	yes ²	yes	...	yes ⁵⁰	yes ²	yes ⁴	yes	...	...	...	yes	yes	...
Alaska.....	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	yes	yes	...	...
Arizona.....	yes	yes	yes	yes	yes	yes ⁵	yes	...	yes	yes	yes ⁴	yes	yes	yes	yes
Arkansas.....	yes	yes	yes ²	yes	yes	yes	yes	yes	...	yes	yes ¹⁴	yes	yes	yes	yes
California.....	yes	yes ⁵³	yes	yes ⁵³	yes	yes	yes ⁵³	yes ¹⁴	...	yes	...	yes	...	yes	yes
Colorado.....	yes	yes	yes ²	yes	yes	yes	yes	yes ⁴	...	yes	yes ²	...	yes	yes	...
Connecticut.....	yes	yes	yes ¹⁴	yes	...	yes ¹⁸	...	yes ⁴	...	...	...	...	...	...	yes
Delaware.....	yes	yes	yes ²	yes ²	...	yes ²⁰	yes	yes ⁴	...	yes	...	...	...	...	...
D. C.....	yes	yes ⁵⁷	yes ²	...	...	yes	...	...	...	...	yes ⁴	...	...	...	...
Florida.....	yes	yes	yes ²	yes	yes	...	...	...	...	yes	...	...	yes	...	...
Georgia.....	yes	yes	yes ²	yes	yes	yes ²⁰	yes	yes	yes	yes	yes	yes	yes	yes	yes
Hawaii.....	yes	yes	yes ⁵⁸	yes ²	...	yes ⁵⁹	yes ⁶⁰	yes ¹⁴	...	...	yes	...	yes ²	...	...
Idaho.....	yes	yes	yes	...	...	yes	yes	yes ¹⁴	...	yes	...	...	...	...	...
Illinois.....	yes	yes	yes ²	yes ²	yes	yes	...	...	...	yes	...	...	...	...	...
Indiana.....	yes	yes	yes ²	yes	yes	...	yes ²	yes ⁴	...	...	...	...	...	...	...
Iowa.....	yes	yes	yes ²	yes	...	yes	...	...	...	...	...	...	...	...	...
Kansas.....	yes	yes	yes ²	yes	yes	yes	...	yes ⁴	yes	yes	...	...	...	yes	...
Kentucky.....	yes	yes	yes	yes	yes	yes	...	yes ⁴	yes	...	yes ⁴	...	...	yes	yes
Louisiana.....	yes	yes	yes	yes	...	yes	yes	...	...	...	yes ²	...	...	...	...
Maine.....	yes	yes	yes	yes	yes	yes ¹⁸	yes	...	...	...	...	yes	...	...	...
Maryland.....	yes	yes	yes ²¹	...	yes ⁴⁵	yes ¹²	...	yes ¹⁴	...	...	yes ¹⁴	...	...	...	...
Massachusetts.....	yes	yes	yes ¹⁵	yes	yes	yes ²⁴	yes	...	...	...	...	...	yes	...	...
Michigan.....	yes	yes	yes ²	yes	yes	yes ²⁵	yes	yes	...	yes	...	...	yes	yes	yes
Minnesota.....	yes	yes	yes ²	yes ²	yes	yes	...	yes ⁴	...	...	yes ²	...	...	...	...
Mississippi.....	yes	yes	yes	yes	yes	yes	...	yes ⁵⁶	yes	yes	...	...	yes	yes	...
Missouri.....	yes	yes	yes	yes	yes	yes	...	...	yes	yes	...	yes	...	...	...
Montana.....	yes	yes	yes	...	...	yes	yes	yes	...	...	...	...	...	...	...
Nebraska.....	yes	yes	yes	yes	yes	yes ²⁵	yes	yes ⁴	...	...	...	...	...	...	...
Nevada.....	yes	yes	yes ²	yes	yes	yes	yes	yes ²	...	...	...	...	...	...	...
New Hampshire.....	yes	yes	yes ¹⁴	yes ¹⁴	yes	yes ⁵	yes ¹⁴	...	...	...	...	...	...	yes	...
New Jersey.....	yes	yes	yes ²	...	...	...	...	yes ⁴	yes	...	...	...	...	...	...
New Mexico.....	yes	yes	yes	yes	yes	yes	yes	yes ⁴	yes	...	...	...	...	...	...
New York.....	yes	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Carolina.....	yes	...	...	...	yes	...	...	yes ²⁷	yes	...	yes ²	...	...	...	...
North Dakota.....	yes	yes	yes ²	yes ²	...	yes	yes ²	yes ⁴	...	...	...	...	yes ²	...	...
Ohio.....	yes	yes	...	yes ¹⁴	yes	yes	...	...	...	yes	...	...	...	yes	...
Oklahoma.....	yes	yes	yes ²	yes	yes	yes	yes	yes ⁴	yes	...	...	...	...	yes	...
Oregon.....	yes	yes	yes ²	yes ²⁵	yes	yes	...	yes ¹⁴	...	...	...	yes	...	...	...
Pennsylvania.....	yes	yes	yes ²	...	yes ⁴⁵	yes ²⁰	...	...	yes	...	...	yes	...	...	...
Rhode Island.....	yes	yes	yes ⁴	yes	yes	yes ⁵²	yes ²	yes ¹⁶	...	yes	yes ²⁷	...	yes	yes	yes
South Carolina.....	yes	yes	yes ²	yes	...	...	...	...	...	...	...	...	...	...	...
South Dakota.....	yes	yes ²	yes ²	yes ²	...	yes	yes ⁴	yes ²	...	...	...	...	...	...	...
Tennessee.....	yes	yes	yes ²	yes	yes	yes	yes	...	yes	yes	...	...	...	...	...
Texas.....	yes ⁵⁴	yes	yes ¹⁴	...	...	yes ⁵⁵	...	yes ⁴	...	...	yes ⁵²	yes	...	yes	...
Utah.....	yes	yes	yes	yes	yes	yes	yes	yes	...	...	yes ¹⁴	...	...	...	...
Vermont.....	yes	yes	yes ¹⁴	...	...	yes ²⁵	yes	yes ⁴	...	...	yes ¹⁴	...	...	...	...
Virginia.....	yes	...	yes ²	...	yes	yes	...	...	yes	...	...	...	...	...	...
Washington.....	yes	yes	yes ²	yes	yes	yes	yes	yes ²	...	...	yes ⁴	yes	...	...	yes
West Virginia.....	yes	yes	yes ²	yes	...	yes	...	...	...	...	...	...	yes	...	...
Wisconsin.....	yes	yes	yes ²	yes	...	yes ²⁵	yes	...	...	...	yes ⁴	...	...	...	...
Wyoming.....	yes	yes	yes ²	yes	yes	yes	yes ²	yes ²	yes	...	yes ²	yes	...	...	...

¹ If unknown to husband. ² 1 year. ³ 2 years. ⁴ 5 years. ⁵ Crime against nature. ⁶ With imprisonment 1 year. ⁷ Absence of 1 year. ⁸ Felony before marriage. ⁹ Husband a vagrant. ¹⁰ Infamous crime. ¹¹ Loss of sanity at time of marriage. ¹² Relationship within prohibited degree. ¹³ Wife a prostitute. ¹⁴ 3 years. ¹⁵ Absence of 3 years. ¹⁶ Imprisonment of 2 years. ¹⁷ Habitual intemperance. ¹⁸ With imprisonment for life. ¹⁹ Absence of 7 years. ²⁰ Mindlessness or epilepsy for 5 years. ²¹ Defendant obtained divorce from plaintiff in any other state or country. ²² Absence. ²³ Attempt by one party on life of other. ²⁴ Infected other party with communicable venereal disease. ²⁵ Joining a religious cult disbelieving in marriage. ²⁶ Unchaste behavior of wife after marriage. ²⁷ Public indignity. ²⁸ 18 months. ²⁹ With imprisonment of 3 years, 18 months of which have been served. ³⁰ Excessively bad conduct; any cause which, by laws of state, renders marriage null and void at its inception. ³¹ With imprisonment of 5 years. ³² With imprisonment of 3 years. ³³ Noncohabitation for 3 years. ³⁴ 10 years. ³⁵ 1 year, if committed after marriage. ³⁶ Gross neglect of duty. ³⁷ 10 years. ³⁸ Any other gross misbehavior or wickedness. ³⁹ Absence of 2 years. ⁴⁰ Infamous crime before marriage. ⁴¹ Fugitive from justice and absent for 2 years. ⁴² Absence of 5 years.

(Footnotes continued on next page.)

Per Cent of Population Ever Married: U. S., 1890-1959

Source: U. S. Bureau of the Census.

Years	1890	1900	1910	1920	1930	1940	1950	1959
.....	0.4	0.9	1.0	1.8	1.5	1.5	2.6	2.4
.....	19.2	22.1	24.6	29.0	28.9	27.8	43.9	48.6
.....	53.8	54.0	56.9	60.3	63.1	64.0	81.5	75.3
.....	73.3	72.2	73.7	75.7	78.7	79.3		87.4
.....	84.5	82.9	83.1	83.7	85.6	86.0		91.0
.....	90.7	89.6	88.7	87.8	88.5	88.9	89.4	91.8
9.....	8.0	9.4	9.7	10.8	10.9	10.0	15.2	13.3
.....	48.1	48.3	51.4	54.3	53.8	52.8	68.4	71.5
.....	74.5	72.4	74.9	76.8	78.2	77.2	89.2	90.7
.....	84.8	83.3	83.8	85.0	86.7	85.3		93.0
.....	90.1	88.8	88.5	88.6	89.9	89.6		93.9
.....	92.9	92.1	91.4	90.3	90.8	91.3	92.2	92.1

Marriage Prospects of Single Men and Women

Source: U. S. Bureau of the Census.

Per cent of population single ¹		Per cent who ever marry ²		Age	Per cent of population single ¹		Per cent who ever marry ²	
Male	Female	Male	Female		Male	Female	Male	Female
99.1	98.0	92.2	93.5	33.....	11.9	8.3	58.5	42.1
99.2	94.0	92.4	93.5	34.....	11.0	8.1	54.1	38.0
98.4	86.4	92.5	93.5	35.....	10.9	9.3	49.7	34.3
96.1	75.6	92.6	93.3	36.....	10.3	8.1	45.6	31.0
90.7	62.4	92.7	92.9	37.....	9.7	7.8	41.6	27.9
82.2	50.0	92.6	92.1	38.....	9.9	8.3	38.1	25.2
70.2	38.7	92.3	90.8	39.....	8.9	7.5	34.8	22.6
58.6	30.1	91.8	89.0	40.....	9.9	9.3	31.7	20.2
47.1	23.9	90.0	86.3	41.....	8.5	7.5	28.8	18.1
38.4	19.8	89.6	82.8	42.....	8.8	8.1	26.0	16.1
32.2	16.5	88.0	78.5	43.....	8.2	7.5	23.5	14.4
27.6	15.0	85.9	73.7	44.....	8.7	7.7	21.2	12.8
22.7	12.7	83.4	68.9	45.....	9.5	8.9	19.1	11.3
19.4	11.6	80.3	64.4	50.....	9.6	8.8	11.1	6.1
16.6	10.4	76.6	59.9	55.....	8.9	8.0	6.2	3.2
15.9	10.8	72.3	55.3	60.....	9.2	8.6	3.3	1.6
13.3	9.2	67.5	50.8	65 and over.....	8.3	8.9	1.9	0.8
13.1	9.2	63.0	46.4					

single within specified year of age in 1950, in 3% sample of population. ² Per cent of persons single of year of age who marry during that year and all later years. NOTE: "Single" means those never married; it excludes widowed and divorced. Hence, "marriage prospects" refers to likelihood of first marriage

Median Age at First Marriage in the U. S., 1890-1959

Source: U. S. Bureau of the Census.

Males	Females	Year	Males	Females	Year	Males	Females	Year	Males	Females
1961	22.0	1920.....	24.6	21.2	1950.....	23.9	21.6	1958.....	22.4	20.2
1959	21.9	1930.....	24.3	21.3	1957.....	22.5	20.3	1959.....	22.3	20.2
1951	21.6	1940.....	24.3	21.5						

Footnotes for Grounds for Divorce (contd.)

on judgment. ⁴⁶ If at time of marriage and incurable. ⁴⁶ Indignities. ⁴⁷ Ungovernable temper. ⁴⁸ Non-
or 2 years. ⁴⁹ Incompatibility. ⁵⁰ Imprisonment for 2 years, sentence being for 7 years or more. ⁵¹ Non-
or 5 years. ⁵² 7 years. ⁵³ 1 year. ⁵⁴ Wife's adultery. Husband's adultery when combined with abandon-
suit for divorce cannot be sustained until 12 months after final judgment of conviction. Divorce cannot
plaintiff's testimony contributed toward conviction. ⁵⁵ Absence of 3 years and/or insanity at time of
limited divorce; may be grounds for absolute divorce 2 years later. ⁵⁶ 6 months. ⁵⁷ Imprisonment for
years or more. ⁵⁸ Not less than 60 days. ⁵⁹ Either party has contracted Hansen's disease (leprosy).
one spouse; presumption of death.

Divorce Information, by State

Sources: Legal information, questionnaires to states; Divorce statistics, Public Health Service, U. S. Dept. of Health, Education and Welfare.

State	Residence for divorce	Period before parties may remarry		Divorces ¹	
		Plaintiff	Defendant	1958	1957
Alabama.....	1 yr.	60 da.	60 da.	12,311	15,711
Alaska.....	1 yr.	none	none	560	6
Arizona.....	1 yr.	1 yr.	1 yr.	5,910 ⁴	.....
Arkansas.....	90 da.	none	none	4,948 ⁵	3,811
California.....	1 yr.	1 yr.	1 yr.	43,700	.....
Colorado.....	1 yr.	none	none	5,700 ⁴	.....
Connecticut.....	3 yr.	none	none	2,461	2,611
Delaware.....	2 yr.	none	none	573	611
D. C.....	1 yr. ⁶	6 mo.	6 mo.	1,148	1,211
Florida.....	6 mo.	none	none	17,604	20,711
Georgia.....	1 yr.	none	none	7,975	8,311
Hawaii.....	2 yr.	none	none	1,228	1,311
Idaho.....	6 wk.	none	none	2,372	2,611
Illinois.....	1 yr.	none	none	20,719	.....
Indiana.....	1 yr.	none	none	12,849 ⁵	.....
Iowa.....	1 yr.	1 yr. ⁷	1 yr. ⁷	4,299	4,711
Kansas.....	1 yr.	6 mo.	6 mo.	4,789	5,611
Kentucky.....	1 yr.	none	none	.....	.....
Louisiana.....	1 yr.	none ⁹	none ⁹	.....	.....
Maine.....	6 mo.	none	none	1,884	1,701
Maryland.....	1 yr.	none	none	5,040	5,241
Massachusetts.....	5 yr.	6 mo.	2 yr.	5,587	.....
Michigan.....	1 yr.	(⁹)	(⁹)	14,040	.....
Minnesota.....	1 yr.	6 mo.	6 mo.	3,881	3,811
Mississippi.....	1 yr.	(¹⁰)	(¹⁰)	5,016	5,031
Missouri.....	1 yr. ¹¹	none	none	10,747 ⁵	12,711
Montana.....	1 yr.	none	none	2,023	2,061
Nebraska.....	1 yr.	6 mo.	6 mo.	2,129	.....
Nevada.....	6 wk.	none	none	9,409	.....
New Hampshire.....	1 yr.	none	none	991	1,181
New Jersey.....	2 yr.	none ¹²	none ¹²	4,316	4,411
New Mexico.....	1 yr. ¹³	none	none	2,771 ⁵	1,301
New York.....	(¹⁴)	none	3 yr. ¹⁵	8,670	.....
North Carolina.....	2 yr.	none	none	5,392	6,371
North Dakota.....	1 yr.	(⁹)	(⁹)	515	581
Ohio.....	1 yr.	none	none	21,555	22,801
Oklahoma.....	6 mo.	6 mo.	6 mo.	12,466 ⁴	13,121
Oregon.....	1 yr.	6 mo.	6 mo.	5,452	6,061
Pennsylvania.....	1 yr.	none	none	12,243	14,571
Rhode Island.....	2 yr.	none	none	946	.....
South Carolina.....	1 yr.	none	none	2,759	3,031
South Dakota.....	1 yr.	none	none ¹⁶	641	761
Tennessee.....	1 yr.	none	none ¹⁷	8,808 ⁵	9,581
Texas.....	1 yr.	1 yr. ¹⁸	1 yr. ¹⁸	33,678 ⁵	.....
Utah.....	3 mo.	3 mo. ¹²	3 mo. ¹²	1,259	2,191
Vermont.....	1 yr.	none	2 yr. ¹⁹	502	471
Virginia.....	1 yr.	4 mo.	4 mo.	6,690	7,111
Washington.....	1 yr.	none	none	9,003 ⁴	.....
West Virginia.....	1 yr. ²⁰	60 da. ²¹	60 da. ²¹	3,577 ⁵	.....
Wisconsin.....	2 yr.	1 yr. ²²	1 yr. ²²	4,499	.....
Wyoming.....	60 da.	none	none	1,187	1,211

¹ By place of occurrence, including reported annulments. Leaders (....) indicate data unavailable. ² Persons divorced outside D. C. ³ Unless otherwise set out by judge. ⁴ Estimated. ⁵ Incomplete. ⁶ 2 yrs. if cause for divorce occurred outside D. C. ⁷ At discretion of court. ⁸ For husband; 10 mo. for wife. In case of adultery, guilty party cannot marry accomplice. ⁹ Until court is adjourned that grants the divorce. ¹⁰ Court may prohibit defendant in adultery cases from remarrying. ¹¹ Less than year under special circumstances. ¹² 3 mo. between first and final judgment; in Utah, 90 days between first and final judgment, during which must consult counseling services. ¹³ Servicemen acquire residence by being continuously stationed at military in state for 1 year. ¹⁴ Action for divorce may be maintained where: (1) both parties were residents of state when offense was committed; (2) parties were married within state; (3) plaintiff was resident of state when offense committed and is resident when action is commenced; (4) offense was committed within state and injured party may not marry, except to innocent party, until death of innocent party. ¹⁵ Party guilty of adultery may marry the correspondent. ¹⁶ For cruelty only, but technically not usually observed. ¹⁷ Period may be shortened by personal service can be had within state. ¹⁸ Attorney can lengthen waiting period if desired. ¹⁹ Divorce may be vacated by court upon motion of either party within 1-year waiting period. ²⁰ Divorce may be vacated by court upon motion of either party within 1-year waiting period.

BIRTHS

Registered Live Births and Birth Rates, 1958-59

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

State	Number			Rate		
	1958	1959	Per cent change	1958	1959	Per cent change
.....	81,994	82,054	+0.1	25.9	25.7	-0.8
.....	7,202	7,087	-1.6	37.7	37.1	-1.6
.....	33,410	34,975	+4.7	28.4	28.4	0
.....	41,498	41,224	-0.7	23.7	23.6	-0.4
.....	346,645	355,288	+2.5	24.3	24.3	0
.....	43,240	43,980	+1.7	26.1	26.1	0
.....	54,898	55,112	+0.4	23.2	22.8	-1.7
.....	11,751	11,705	-0.4	26.5	25.8	-2.6
.....	34,120	33,083	-3.0	41.2	39.4	-4.4
.....	107,837	112,057	+3.9	23.9	23.5	-1.7
.....	101,037	102,908	+1.9	26.7	26.8	+0.4
.....	16,764	17,027	+1.6	26.5	26.0	-1.2
.....	16,618	17,018	+2.4	25.5	25.6	+0.4
.....	228,262	236,446	+3.6	22.8	23.2	+1.8
.....	111,392	111,361	-0.0	24.4	24.0	-1.6
.....	63,086	65,105	+3.2	22.7	23.2	+2.2
.....	49,936	50,805	+1.7	23.6	23.7	+0.4
.....	74,097	75,153	+1.4	24.0	24.0	0
.....	90,044	92,172	+2.4	29.0	29.1	+0.3
.....	23,572	22,910	-2.8	25.0	24.1	-3.6
.....	67,311	68,992	+2.5	22.7	22.8	+0.4
.....	116,180 ²	(1)	(1)	(1)	(1)	(1)
.....	201,376	197,053	-2.1	25.7	24.8	-3.5
.....	84,704	87,417	+3.2	25.3	25.7	+1.6
.....	59,473	61,449	+3.3	27.6	28.1	+1.8
.....	102,576	102,198	-0.4	24.3	24.1	-0.8
.....	17,049	17,392	+2.0	25.3	25.3	0
.....	32,361	33,792	+4.4	22.6	23.2	+2.7
.....	6,742	7,010	+4.0	24.8	25.0	+0.8
.....	13,350	12,854	-3.7	22.9	21.7	-5.3
.....	124,605	125,686	+0.9	21.5	21.2	-1.4
.....	28,037	29,509	+5.3	32.8	33.6	+2.4
.....	362,258	363,136	+0.2	22.2	22.0	-0.9
.....	110,950	111,561	+0.6	24.8	24.6	-0.8
.....	16,617	17,002	+2.3	26.0	26.5	+1.9
.....	234,914	231,931	-1.3	24.6	23.9	-2.8
.....	49,972	50,666	+1.4	22.2	22.3	+0.5
.....	35,973	36,316	+1.0	20.6	20.6	0
.....	250,073	246,655	-1.4	22.3	21.8	-2.2
.....	18,885	19,282	+2.1	21.8	22.0	+0.9
.....	60,380	59,823	-0.9	25.3	24.8	-2.0
.....	17,662	18,183	+2.9	25.8	26.5	+2.7
.....	84,415	83,541	-1.0	24.3	23.9	-1.6
.....	248,712	252,193	+1.4	26.7	26.5	-0.8
.....	26,167	25,355	-3.1	30.5	28.8	-5.6
.....	9,213	9,172	-0.4	24.8	24.7	-0.4
.....	91,545	91,718	+0.2	23.4	23.0	-1.7
.....	64,495	64,799	+0.5	23.3	23.0	-1.3
.....	44,577	42,902	-3.8	22.7	21.8	-4.0
.....	95,864	98,618	+2.9	24.4	24.6	+0.8
.....	7,976	8,026	+0.6	25.3	25.2	-0.4

not available. ² Final 1958 data. NOTE: Rates are per 1,000 estimated midyear population in each year; births are by place of occurrence. Data are provisional.

Live Births in the United States, 1910-1959

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Year	Births ¹	Rate ²	Year	Births ¹	Rate ²	Year	Births ¹	Rate ²
1910.....	2,777,000	30.1	1927.....	2,802,000	23.5	1944.....	2,939,000	21.2
1911.....	2,809,000	29.9	1928.....	2,674,000	22.2	1945.....	2,858,000	21.2
1912.....	2,840,000	29.8	1929.....	2,582,000	21.2	1946.....	3,411,000	21.2
1913.....	2,869,000	29.5	1930.....	2,618,000	21.3	1947.....	3,817,000	21.3
1914.....	2,966,000	29.9	1931.....	2,506,000	20.2	1948.....	3,637,000	21.3
1915.....	2,965,000	29.5	1932.....	2,440,000	19.5	1949.....	3,649,000	21.3
1916.....	2,964,000	29.1	1933.....	2,307,000	18.4	1950.....	3,632,000	21.3
1917.....	2,944,000	28.5	1934.....	2,396,000	19.0	1951 ³	3,823,000	21.3
1918.....	2,948,000	28.2	1935.....	2,377,000	18.7	1952 ³	3,913,000	21.3
1919.....	2,740,000	26.1	1936.....	2,355,000	18.4	1953 ³	3,965,000	21.3
1920.....	2,950,000	27.7	1937.....	2,413,000	18.7	1954 ³	4,078,000	21.3
1921.....	3,055,000	28.1	1938.....	2,496,000	19.2	1955.....	4,104,000	21.3
1922.....	2,882,000	26.2	1939.....	2,466,000	18.8	1956 ³	4,218,000	21.3
1923.....	2,910,000	26.0	1940.....	2,559,000	19.4	1957 ³	4,308,000	21.3
1924.....	2,979,000	26.1	1941.....	2,703,000	20.3	1958 ³	4,255,000	21.3
1925.....	2,909,000	25.1	1942.....	2,989,000	22.2	1959 ³	4,292,000	21.3
1926.....	2,839,000	24.2	1943.....	3,104,000	22.7			

¹ Adjusted for underregistration and for births in states not in the birth registration area from 1915 to 1922. Rates for earlier years are based upon data for a few states. ² Rates are per 1,000 population estimated as of July 1 for each year except 1940 and 1950, which are as of April 1, the census date; for 1941-46 based on population including armed forces overseas. ³ Based on 50% sample of births. ⁴ Provisional; includes Alaska.

Live Births by Order of Birth, 1940-58

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Year & race	Total	Birth Order						
		1st	2nd	3rd	4th	5th	6th & 7th	8th & 9th
1940.....	2,558,647	940,116	639,236	349,941	205,443	131,099	154,138	138,618
1945.....	2,858,449	961,456	763,494	445,705	248,607	148,251	159,100	131,811
1947.....	3,816,770	1,574,001	1,018,873	523,722	266,976	151,703	156,269	125,211
1949.....	3,648,867	1,234,963	1,092,658	584,175	292,951	158,496	160,328	125,211
1950.....	3,631,512	1,140,398	1,096,716	630,102	314,067	165,808	162,039	122,311
1951 ¹	3,822,961	1,195,333	1,116,358	685,721	351,234	180,341	170,285	123,611
1952 ¹	3,913,115	1,169,490	1,121,825	732,939	386,813	199,921	178,022	124,411
1953 ¹	3,964,750	1,149,993	1,119,751	752,655	412,076	216,238	189,545	124,411
1954 ¹	4,078,055	1,159,644	1,119,393	785,066	442,800	234,717	206,708	129,711
1955.....	4,104,112	1,138,375	1,103,633	799,598	461,561	249,060	219,752	132,111
1956 ¹	4,218,035	1,165,552	1,109,403	820,686	483,232	263,395	236,310	138,411
1957 ¹	4,308,251	1,180,072	1,110,646	838,889	504,372	278,500	250,292	146,811
1958 ¹	4,255,005	1,140,328	1,085,413	826,025	511,090	285,603	257,392	149,111
White ¹	3,598,003	998,573	958,633	722,270	430,699	224,304	179,287	84,211
Nonwhite ¹	657,002	141,755	126,780	103,755	80,391	61,299	78,105	64,911

Birth Rate

Year	79.9	29.3	20.0	10.9	6.4	4.1	4.8	4.8
1940.....	79.9	29.3	20.0	10.9	6.4	4.1	4.8	4.8
1945.....	85.9	28.9	22.9	13.4	7.5	4.5	4.8	4.8
1947.....	113.3	46.7	30.3	15.6	7.9	4.5	4.6	4.6
1949.....	107.1	36.2	32.1	17.1	8.6	4.7	4.7	4.7
1950.....	106.2	33.3	32.1	18.4	9.2	4.8	4.7	4.7
1951 ¹	111.3	34.8	32.5	20.0	10.2	5.2	5.0	5.0
1952 ¹	113.5	33.9	32.5	21.3	11.2	5.8	5.2	5.2
1953 ¹	114.7	33.3	32.4	21.8	11.9	6.3	5.5	5.5
1954 ¹	117.6	33.5	32.3	22.6	12.8	6.8	6.0	6.0
1955.....	118.0	32.7	31.7	23.0	13.3	7.2	6.3	6.3
1956 ¹	120.8	33.4	31.8	23.5	13.8	7.5	6.8	6.8
1957 ¹	122.7	33.6	31.6	23.9	14.4	7.9	7.1	7.1
1958 ¹	120.1	32.2	30.6	23.3	14.4	8.1	7.3	7.3
White ¹	114.8	31.9	30.6	23.0	13.7	7.2	5.7	5.7
Nonwhite ¹	161.2	34.8	31.1	25.5	19.7	15.0	19.2	19.2

NOTE: Birth order refers to number of children born alive to mother. Figures are shown to the last digit as reported for convenience in summation. They are not assumed to be accurate to the last digit. Figures for births of not stated are distributed, including births that occurred in Massachusetts, which did not require the reporting of birth order. Rates are live births per 1,000 female population aged 15-44 years in each specified group. Population enumerated as of April 1 for 1940 and 1950, and estimated as of July 1 for 1945-49 and 1951-58. Births are adjusted for under-registration. ¹ 1951-54 and 1956-58 are based on birth data from a 50% sample.

Birth Rate for Selected Countries, 1938, 1953, 1955, 1959

Source: Statistical Office of the United Nations.

Country	Rate ¹				Country	Rate ¹			
	1938	1953	1955	1959 ²		1938	1953	1955	1959 ²
Canada	20.7	28.1	28.2	27.5	Europe (cont.)				
France	45.5	48.1	48.7	42.8	Hungary	19.9	21.6	21.5	15.2
Germany	43.7	47.9	47.9	45.8	Ireland	19.4	21.2	21.1	21.1
Italy	43.5	45.0	46.4	47.0	Italy	23.8	17.7	18.1	18.4
Japan	40.8	42.3	42.9	44.5	Luxemburg	14.9	16.0	16.1	15.6
Netherlands	45.5	37.9	39.4	43.8	Netherlands	20.5	21.8	21.4	21.3
Norway	38.6	35.1	34.4	31.6	Norway	15.4	18.7	18.5	18.0
Portugal	17.6 ³	24.7	24.7	24.1	Portugal	26.6	23.4	23.9	23.5
Rumania					Rumania	29.5	23.8	25.6	....
Spain					Spain	20.1	20.6	20.6	21.8
Sweden	36.1	34.6	33.5	35.4	Sweden	14.9	15.4	14.8	14.1
Switzerland		36.0	37.7	39.2	Switzerland	15.2	17.0	17.1	17.7
United Kingdom	33.7	46.1	47.2	....	United Kingdom	15.5	15.9	15.5	16.9
Asia					Asia				
Ceylon	13.9	14.8	15.6	17.5	Ceylon	35.8	38.7	37.3	....
India	16.0	16.6	16.8	17.2	India ⁸	33.3	24.8	27.0	25.7 ⁶
Israel	22.8	20.9	20.1	17.6	Israel	26.3 ⁹	32.1 ¹⁰	29.2 ¹⁰	26.6 ¹⁰
Japan	16.7	21.2	20.3	16.0	Japan ¹¹	27.1	21.5	19.4 ¹²	17.5 ¹²
Other	18.1	17.9	17.3	16.3	Other				
Australia	21.0 ⁷	21.9	21.2	18.9	Australia ¹³	17.5	22.9	22.6	22.6
New Zealand	15.0	18.9	18.6	18.4	New Zealand ¹⁴	18.0	24.1	24.9	25.1
U. of So. Africa	19.7	15.8	16.0	17.6	U. of So. Africa ¹⁵	25.0	25.1	24.6	25.4

¹ of births per 1,000 population. ² Provisional. ³ Excluding Alaska and Hawaii. ⁴ Excluding tribal areas for 1953, 1955 and 1959 include Indians in Bocas del Toro and Darién provinces. ⁵ Estimated rate. ⁶ Indian jungle population. ⁷ Finnish nationals in Finland only. ⁸ Data are for a changing group of states which, in 1955, included a population of about 217 million. ⁹ Jewish population only. ¹⁰ Excluding population in the Negev. ¹¹ Japanese nationals in Japan only. ¹² Including Amami Islands. ¹³ Excluding aborigines. ¹⁴ Excluding Maoris. ¹⁵ White population only (about 20% of total). NOTE: Leaders information is not available.

Registered Live Births and Birth Rates by Race

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

1,000 population in each specified group, enumerated as of Apr. 1 for 1940 and 1950, and estimated as of July 1 for 1945 (including armed forces overseas).

	Births, 1958*	Rates			Race	Births, 1958*	Rates		
		1950	1945	1940			1950	1945	1940
.....	3,572,306	22.7	19.1	17.5	Japanese.....	8,502	24.1	22.9	14.8
.....	594,500	31.0	23.3	21.7	Other.....	5,340	18.3	20.7	21.0
.....	18,458	39.0	26.8	28.6	All races.....	4,203,812	23.6	19.5	17.9
.....	4,706	42.9	17.1	14.2					

50% sample of registered births.

Multiple Births in the United States, 1951-57

Source: Statistical Bulletin of the Metropolitan Life Insurance Co.

Race and color of mother	Number of confinements*	Cases of multiple births per million confinements			
		Total	Twins	Triplets	Quadruplets
Whites	27,697,757	10,634	10,539	93	1.1
Non-whites	3,394,344	6,275	6,244	31	†
	8,785,632	8,585	8,523	62	0.2
	7,725,235	11,156	11,058	97	1.1
	4,847,641	13,808	13,664	141	2.5
	2,318,987	15,937	15,749	185	3.4
	590,395	12,642	12,520	122	†
	35,523	7,572	7,544	28	†
All races	23,751,611	10,145	10,059	85	1.0
	3,946,146	13,576	13,423	141	1.8

* Confinements from which at least one infant was born alive. † Cases too few to warrant computation. Source: Various reports by the National Office of Vital Statistics.

Live Births by Age of Mother; U. S., 1940-1958

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Year and race	Total ¹	Age of mother						
		Under 15 yrs. ²	15-19 yrs.	20-24 yrs.	25-29 yrs.	30-34 yrs.	35-39 yrs.	40-44 yrs.
1940.....	2,558,647	3,865	332,667	799,537	693,268	431,468	222,015	68,269
1945.....	2,858,449	4,028	298,868	832,746	785,299	554,906	296,852	78,853
1947.....	3,816,770	4,911	445,047	1,254,902	1,069,820	635,647	318,516	81,605
1949.....	3,648,867	5,445	448,768	1,183,647	1,029,851	596,014	301,785	77,585
1950.....	3,631,512	5,413	432,911	1,155,167	1,041,360	610,816	302,780	77,743
1951 ⁴	3,822,961	5,460	456,523	1,220,900	1,090,147	649,542	313,843	81,137
1952 ⁴	3,913,115	5,358	449,163	1,232,057	1,120,702	690,940	326,299	83,018
1953 ⁴	3,964,750	5,634	466,495	1,239,197	1,126,449	702,219	333,652	85,730
1954 ⁴	4,078,055	6,396	488,313	1,275,313	1,137,123	731,850	344,490	89,122
1955.....	4,014,112	6,181	493,770	1,290,939	1,133,155	732,540	352,320	89,777
1956 ⁴	4,218,035	6,656	530,017	1,341,970	1,144,456	735,734	361,933	91,834
1957 ⁴	4,308,251	7,269	559,703	1,377,463	1,153,327	740,199	371,902	92,819
1958 ⁴	4,255,005	6,930	563,338	1,383,242	1,120,494	720,354	364,660	90,593
White ⁴	3,598,003	2,725	436,746	1,176,892	968,056	619,816	312,138	77,309
Nonwhite ⁴	657,002	4,205	126,592	206,350	152,438	100,538	52,522	13,284

Birth rate

1940.....	79.9	0.7	54.1	135.6	122.8	83.4	46.3	15.6
1945.....	85.9	0.8	51.1	138.9	132.2	100.2	56.9	16.6
1947.....	113.3	0.9	79.3	209.7	176.0	111.9	58.9	16.6
1949.....	107.1	1.0	83.4	200.1	165.4	102.1	53.5	15.3
1950.....	106.2	1.0	81.6	196.6	166.1	103.7	52.9	15.1
1951 ⁴	111.3	1.0	86.9	212.0	174.2	108.3	54.1	15.3
1952 ⁴	113.5	0.9	85.4	218.1	180.4	113.1	56.1	15.3
1953 ⁴	114.7	0.9	87.5	224.5	183.8	113.0	57.3	15.5
1954 ⁴	117.6	1.0	89.8	235.6	188.5	116.4	58.8	15.8
1955.....	118.0	0.9	89.7	240.4	190.8	115.8	59.5	15.7
1956 ⁴	120.8	1.0	94.2	251.3	195.5	116.4	60.3	15.9
1957 ⁴	122.7	1.0	96.1	257.6	200.5	118.0	60.8	16.0
1958 ⁴	120.1	0.9	91.6	255.1	198.9	116.3	58.6	15.6
White ⁴	114.8	0.4	81.1	248.3	195.3	112.9	56.0	14.8
Nonwhite ⁴	161.2	4.4	165.3	301.7	225.2	142.8	80.6	22.4

NOTE: Births are adjusted for underregistration. Figures are shown to the last digit as computed for convenience in summation. They are not assumed to be accurate to the last digit. Figures for age of mother not stated are distributed. Rates are live births per 1,000 female population in each specified group, enumerated as of April 1 for 1940 and 1950, and estimated as of July 1 for 1945-49 and 1951-57. ¹ Rates computed by relating total births, regardless of age of mother, to female population aged 15-44 years. ² Rates computed by relating births to mothers under 15 years, to female population aged 10-14. ³ Rates computed by relating births to mothers 45 years and over, to female population aged 45-49 years. ⁴ 1951-54 and 1956-58 are based on a 50% sample of births.

Households, Families and Married Couples in the United States from 1890 to 1959

Source: U. S. Bureau of the Census.

Date	Households		Families		Married couples
	Number	Average population per household	Number	Average population per family	
June 1890.....	12,690,000	4.93	...	...	...
April 1930.....	29,905,000	4.01	...	...	25,174,000
April 1940.....	34,949,000	3.67	...	...	28,517,000
March 1950.....	43,554,000	3.37	32,166,000	3.76	36,091,000
March 1958.....	50,402,000	3.35	39,303,000	3.54	39,182,000
March 1959.....	51,302,000	3.35	43,714,000	3.65	39,529,000
			44,202,000	3.66	

Number of Families in the U. S., April 1940 and 1950

Statistical Bulletin of the Metropolitan Life Insurance Company. Compiled from various reports of the Census. Complete reports of 1960 census not available on time for this edition.

State	1940	1950	Per cent increase	Persons per family, 1950
.....	646,000	729,765	13	3.98
.....	116,000	181,985	57	3.77
.....	472,000	477,200	1	3.78
.....	1,816,000	2,827,110	56	3.29
.....	278,000	338,205	22	3.51
.....	412,000	512,280	24	3.59
.....	64,000	79,730	25	3.65
.....	165,000	198,180	20	3.26
.....	473,000	721,460	53	3.44
.....	715,000	824,095	15	3.91
.....	128,000	148,710	16	3.67
.....	2,008,000	2,287,955	14	3.45
.....	892,000	1,039,105	16	3.50
.....	644,000	686,785	7	3.49
.....	460,000	507,665	10	3.42
.....	671,000	717,535	7	3.86
.....	554,000	648,410	17	3.87
.....	201,000	223,175	11	3.75
.....	431,000	581,840	35	3.68
.....	1,025,000	1,171,805	14	3.62
.....	1,308,000	1,624,875	24	3.62
.....	665,000	747,680	12	3.63
.....	504,000	508,960	1	4.04
.....	986,000	1,057,260	7	3.41
.....	133,000	145,775	10	3.62
.....	327,000	344,720	5	3.51
.....	27,000	40,945	52	3.37
.....	120,000	134,255	12	3.59
.....	1,030,000	1,263,570	23	3.54
.....	119,000	159,885	34	3.97
.....	3,379,000	3,862,050	14	3.47
.....	772,000	939,215	22	4.07
.....	139,000	144,855	4	3.94
.....	1,761,000	2,077,595	18	3.53
.....	587,000	590,840	1	3.50
.....	291,000	411,690	41	3.34
.....	2,345,000	2,639,925	13	3.68
.....	167,000	198,630	19	3.63
.....	410,000	477,780	17	4.19
.....	149,000	160,625	8	3.73
.....	686,000	808,145	18	3.83
.....	1,580,000	1,978,950	25	3.60
.....	130,000	169,925	31	3.83
.....	84,000	90,100	7	3.77
.....	593,000	785,060	32	3.85
.....	451,000	625,185	39	3.36
.....	434,000	479,265	10	3.95
.....	758,000	867,990	15	3.64
.....	60,000	72,235	20	3.57
.....	32,166,000	38,310,980	19	3.60

Projected Population by 1970 for Leading States

Source: U. S. Bureau of the Census

	1959*	Rank	1965	Rank	1970	Rank
.....	16,495,000	1	18,628,000	1	20,023,000	2
.....	14,639,000	2	17,661,000	2	20,296,000	1
.....	11,323,000	3	11,917,000	3	12,508,000	3
.....	10,205,000	4	10,613,000	6	11,353,000	6
.....	9,700,000	5	11,109,000	4	12,258,000	4
.....	9,513,000	6	10,697,000	5	11,752,000	5
.....	7,960,000	7	9,380,000	7	10,483,000	7

d population as of July 1959. NOTE: All figures exclude armed forces overseas.

MORTALITY

Death Rates in the United States, 1900-1959

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Year	Rate	Year	Rate	Year	Deaths	Rate
1900.....	17.2	1920.....	13.0	1940.....	1,417,269	10.1
1901.....	16.4	1921.....	11.5	1941.....	1,397,642	10.1
1902.....	15.5	1922.....	11.7	1942.....	1,385,187	10.3
1903.....	15.6	1923.....	12.1	1943.....	1,459,544	10.9
1904.....	16.4	1924.....	11.6	1944.....	1,411,338	10.6
1905.....	15.9	1925.....	11.7	1945.....	1,401,719	10.6
1906.....	15.7	1926.....	12.1	1946.....	1,395,617	10.0
1907.....	15.9	1927.....	11.3	1947.....	1,445,370	10.1
1908.....	14.7	1928.....	12.0	1948.....	1,444,337	9.9
1909.....	14.2	1929.....	11.9	1949.....	1,443,607	9.7
1910.....	14.7	1930.....	11.3	1950.....	1,452,454	9.6
1911.....	13.9	1931.....	11.1	1951.....	1,482,099	9.7
1912.....	13.6	1932.....	10.9	1952.....	1,496,838	9.6
1913.....	13.8	1933.....	10.7	1953.....	1,517,541	9.6
1914.....	13.3	1934.....	11.1	1954.....	1,481,091	9.2
1915.....	13.2	1935.....	10.9	1955.....	1,528,717	9.3
1916.....	13.8	1936.....	11.6	1956.....	1,564,476	9.4
1917.....	14.0	1937.....	11.3	1957.....	1,633,128	9.6
1918.....	18.1	1938.....	10.6	1958.....	1,647,886	9.5
1919.....	12.9	1939.....	10.6	1959 ¹	1,660,000	9.4

NOTE: Includes only deaths occurring within the registration area. Beginning with 1933, area includes entire U. S. Excludes fetal deaths. Rates per 1,000 population residing in area, as of Apr. 1 for 1940 and 1950, and estimates of July 1 for all other years. ¹ Provisional. Includes Alaska.

Death Rates by Age, Color and Sex; U. S., 1900-1959

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Age group, years	1900	1920	1940	1950	1959 ¹	1900	1920	1940	1950	1959 ¹
White Males						White Females				
Under 1.....	175.9	98.1	56.7	34.0	29.5	142.6	76.1	43.6	25.7	22.1
1-4.....	20.2	9.8	2.8	1.4	1.0	18.7	9.0	2.4	1.1	0.8
5-14.....	3.8	2.7	1.1	.7	0.5	3.8	2.3	.8	.5	0.4
15-24.....	5.8	4.2	2.0	1.5	1.4	5.6	4.3	1.4	.7	0.6
25-34.....	8.1	5.9	2.8	1.9	1.7	8.1	6.5	2.2	1.1	1.0
35-44.....	10.6	7.7	5.1	3.8	3.3	9.6	7.3	3.7	2.4	2.1
45-54.....	15.5	12.0	11.4	9.8	9.3	14.0	10.9	7.5	5.5	5.1
55-64.....	28.5	24.2	25.2	23.0	22.0	25.5	21.7	16.8	12.9	10.9
65-74.....	59.1	54.2	54.0	48.6	50.4	53.4	49.9	41.5	32.4	28.9
75-84.....	128.2	122.5	122.0	105.3	102.2	118.9	116.4	104.8	84.8	75.5
85 and over....	269.2	253.6	251.4	221.2	221.4	256.7	247.0	235.0	196.8	211.1
Nonwhite Males						Nonwhite Females				
Under 1.....	369.3	167.7	101.2	59.9	56.1	299.5	131.1	77.4	47.5	45.1
1-4.....	43.4	15.0	5.3	2.7	2.0	43.5	14.2	4.4	2.3	1.8
5-14.....	7.8	3.7	1.6	1.0	0.8	10.1	3.9	1.4	.7	0.6
15-24.....	11.8	9.9	5.0	2.9	1.9	11.2	10.8	5.0	2.2	1.8
25-34.....	12.5	12.2	8.5	5.0	3.8	11.7	13.5	7.4	3.9	2.9
35-44.....	14.2	14.4	13.2	8.6	7.6	15.6	16.0	11.7	7.5	6.5
45-54.....	24.7	20.1	24.5	18.6	15.1	23.9	23.4	21.1	15.5	13.1
55-64.....	42.1	31.1	37.1	34.8	33.1	42.1	35.8	33.2	27.6	24.1
65-74.....	71.6	60.2	62.8	57.9	66.5	66.4	60.4	52.3	46.1	41.1
75-84.....	131.4	116.0	108.8	90.3	79.3	113.2	106.4	84.1	70.6	64.1
85 and over....	249.3	247.1	199.7	160.2	108.0	195.8	221.2	159.7	133.7	93.1

¹ Estimated from a 10% sample of death certificates. Excludes data for Alaska.

Births and Infant Deaths in Each State Reporting, 1958-59

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

	DEATHS (ALL AGES)						INFANT DEATHS (UNDER 1 YEAR)					
	Number			Rate			Number			Rate		
	1958	1959	Percent change	1958	1959	Percent change	1958	1959	Percent change	1958	1959	Percent change
29,362	28,624	-2.5	9.3	9.0	-3.2	2,912	2,630	-9.7	35.5	32.1	-9.6	
1,183	1,208	+2.1	6.2	6.3	+1.6	277	266	-4.0	38.5	37.5	-2.6	
9,555	10,046	+5.1	8.1	8.1	0	1,129	1,191	+5.5	33.8	34.1	+0.9	
17,109	16,739	-2.2	9.8	9.6	-2.0	1,047	1,037	-1.0	25.2	25.2	0	
123,443	129,897	+5.2	8.6	8.9	+3.5	8,420	8,594	+2.1	24.3	24.2	-0.4	
14,848	15,004	+1.1	9.0	8.9	-1.1	1,322	1,186	-10.3	30.6	27.0	-11.8	
22,861	23,002	+0.6	9.7	9.5	-2.1	1,298	1,238	-4.6	23.6	22.5	-4.7	
4,228	4,126	-2.4	9.5	9.1	-4.2	315	280	-11.1	26.8	24.0	-10.5	
10,084	10,100	+0.2	12.2	12.0	-1.6	1,003	969	-3.4	29.4	29.3	-0.3	
45,157	45,675	+1.1	10.0	9.6	-4.0	3,421	3,541	+3.5	31.7	31.6	-0.3	
33,293	33,822	+1.6	8.8	8.8	0	3,016	3,261	+8.1	29.9	31.7	+6.0	
3,179	3,377	+6.2	5.0	5.1	+2.0	389	410	+5.4	23.2	24.1	+3.9	
5,092	5,297	+4.0	7.8	8.0	+2.6	374	370	-1.1	22.5	21.7	-3.6	
100,332	99,483	-0.8	10.0	9.7	-3.0	5,763	5,948	+3.2	25.2	25.2	0	
43,297	43,106	-0.4	9.5	9.3	-2.1	2,720	2,575	-5.3	24.4	23.1	-5.3	
27,769	28,383	+2.2	10.0	10.1	+1.0	1,405	1,383	-1.6	22.3	21.2	-4.9	
20,220	20,489	+1.3	9.6	9.6	0	1,173	1,204	+2.6	23.5	23.7	+0.9	
28,899	28,862	-0.1	9.4	9.2	-2.1	2,176	2,062	-5.2	29.4	27.4	-6.8	
28,945	28,647	-1.0	9.3	9.0	-3.2	3,113	3,032	-2.6	34.6	32.9	-4.9	
10,424	10,980	+5.3	11.0	11.6	+5.5	528	527	-0.2	22.4	23.0	+2.7	
27,079	26,870	-0.8	9.1	8.9	-2.2	2,079	2,037	-2.0	30.9	29.5	-4.5	
56,866*	.....	.....	.....	.....	.....	2,666*	.....	.....	.....	.....	.....
65,548	66,515	+1.5	8.4	8.4	0	4,943	4,810	-2.7	24.5	24.4	-0.4	
31,243	31,934	+2.2	9.3	9.4	+1.1	1,917	1,880	-1.9	22.6	21.5	-4.9	
21,492	20,714	-3.6	10.0	9.5	-5.0	2,465	2,337	-5.2	41.4	38.0	-8.2	
47,828	47,393	-0.9	11.3	11.2	-0.9	2,706	2,468	-8.8	26.4	24.1	-8.7	
6,162	6,490	+5.3	9.1	9.4	+3.3	435	421	-3.2	25.5	24.2	-5.1	
13,376	13,775	+3.0	9.3	9.5	+2.2	712	663	-6.9	22.0	19.6	-10.9	
2,530	2,613	+3.3	9.3	9.3	0	215	242	+12.6	31.9	34.5	+8.2	
6,642	6,810	+2.5	11.4	11.5	+0.9	326	279	-14.4	24.4	21.7	-11.1	
56,486	56,429	-0.1	9.7	9.5	-2.1	3,012	2,973	-1.3	24.2	23.7	-2.1	
6,214	6,332	+1.9	7.3	7.2	-1.4	1,063	986	-7.2	37.9	33.4	-11.9	
173,832	176,354	+1.5	10.7	10.7	0	8,874	8,983	+1.2	24.5	24.7	+0.8	
36,067	36,367	+0.8	8.1	8.0	-1.2	3,692	3,738	+1.2	33.3	33.5	+0.6	
5,217	5,343	+2.4	8.2	8.3	+1.2	429	415	-3.3	25.8	24.4	-5.4	
91,511	91,142	-0.4	9.6	9.4	-2.1	5,746	5,730	-0.3	24.5	24.7	+0.8	
21,335	21,546	+1.0	9.5	9.5	0	1,377	1,216	-11.7	27.6	24.0	-13.0	
15,406	16,630	+7.9	8.8	9.4	+6.8	849	919	+8.2	23.6	25.3	+7.2	
118,207	120,246	+1.7	10.6	10.6	0	6,352	6,178	-2.7	25.4	25.0	-1.6	
8,866	8,753	-1.3	10.2	10.0	-2.0	407	446	+9.6	21.6	23.1	+6.9	
19,717	19,523	-1.0	8.2	8.1	-1.2	2,048	2,131	+4.1	33.9	35.6	+5.0	
6,629	6,637	+0.1	9.7	9.7	0	470	424	-9.8	26.6	23.3	-12.4	
33,624	33,364	-0.8	9.7	9.5	-2.1	2,667	2,690	+0.9	31.6	32.2	+1.9	
73,314	73,040	-0.4	7.9	7.7	-2.5	6,756	6,621	-2.0	27.2	26.3	-3.3	
6,274	5,999	-4.4	7.3	6.8	-6.8	605	513	-15.2	23.1	20.2	-12.6	
4,276	4,495	+5.1	11.5	12.1	+5.2	216	202	-6.5	23.4	22.0	-6.0	
32,657	32,823	+0.5	8.4	8.2	-2.4	2,878	2,921	+1.5	31.4	31.8	+1.3	
25,623	26,382	+3.0	9.3	9.3	0	1,668	1,579	-5.3	25.9	24.4	-10.0	
17,795	17,773	-0.1	9.1	9.0	-1.1	1,124	1,177	+4.7	25.2	27.4	+8.7	
37,415	37,293	-0.3	9.5	9.3	-2.1	2,169	2,209	+1.8	22.6	22.4	-0.9	
2,581	2,647	+2.6	8.2	8.3	+1.2	223	219	-1.8	28.0	27.3	-2.5	

ates for deaths at all ages are per 1,000 estimated midyear population in each specified area; infant es are deaths under one year per 1,000 live births in each specified area. Data are by place of occurrence, etal deaths and of deaths among armed forces overseas. Data are provisional. Leaders (.....) indicate ble. * Final data

Average of Annual Death Rates for Selected Causes; U. S., 1900-1959

Source: Public Health Service, U. S. Dept. of Health, Education and Welfare.

Cause of death	Death rates per 100,000 in					
	5th Revision					6th Revision
	1900-04	1920-24	1940-44	1945-49	1950	1950
Typhoid fever.....	26.7	7.3	0.6	0.2	0.1	0.1
Communicable diseases of childhood.....	65.2	33.8	4.6	2.3	1.4	1.3
Measles.....	10.0	7.3	1.1	0.6	0.3	0.3
Scarlet fever.....	11.8	4.0	0.4	0.1	0.0	0.2
Whooping cough.....	10.7	8.9	2.2	1.0	0.7	0.7
Diphtheria.....	32.7	13.7	1.0	0.7	0.3	0.3
Diarrhea and enteritis.....	115.3	42.8	9.8	6.5	5.0	5.1
Pneumonia and influenza.....	184.3	140.3	63.7	42.2	35.2	31.3
Influenza.....	22.8	34.8	13.0	5.0	3.5	4.4
Pneumonia.....	161.5	105.5	50.7	37.2	31.7	26.9
Tuberculosis.....	184.7	96.7	43.4	33.3	23.5	22.5
Cancer.....	67.7	86.9	123.1	133.7	137.8	139.8
Diabetes mellitus.....	12.2	17.1	26.2	26.8	28.5	16.2
Cardiovascular-renal diseases.....	359.5	369.9	490.4	489.2	489.0	510.8
Disease of the heart.....	153.0	169.8	303.2	325.1	327.4	356.8
Cerebral hemorrhage.....	106.3	93.5	91.7	91.3	91.7	104.0
Chronic nephritis.....	84.3	81.5	72.1	55.0	46.3	16.4
Syphilis.....	12.9	17.6	12.7	8.8	6.7	5.0
Appendicitis.....	9.4	14.0	7.2	3.5	2.2	2.0
Accidents, all forms.....	79.2	70.8	73.0	68.2	63.5	60.6
Motor vehicle accidents.....	(*)	12.9	22.7	22.3	23.1	23.1
Infant mortality ²	(*)	76.7	42.4	33.3	29.2	29.2
Neonatal mortality ²	(*)	39.7	26.2	22.9	20.5	20.5
Fetal mortality ²	(*)	39.2 ⁴	28.5	24.3	22.9	22.9
Maternal mortality ²	(*)	6.9	2.8	1.4	0.9	0.8
All causes.....	1,621.6	1,196.6	1,062.0	1,003.3	963.8	963.8

¹ Estimated from a 10 per cent sample of death certificates. Excludes data for Alaska. ² Rates per 1,000 live births. ³ Not available. ⁴ 1922-24. NOTE: Includes only deaths occurring within the registration area. Beginning in 1933, area includes the entire United States. Rates per 100,000 population residing in area, enumerated as of April 1, 1940 and 1950 and estimated as of July 1 for all other years. Average rates computed from 5-year totals of deaths occurring in area and corresponding population. The death rates for 1950 are shown on the basis of both the Fifth and Sixth Revisions of the International Lists of Causes of Death. Due to major changes between the Fifth and Sixth Revisions, the death rates are not strictly comparable.

Death Rates by Marital Status, Age, and Sex; U. S., Annual Average for 1949-51

Source: D. Shurtleff, "Mortality and Marital Status," Public Health Reports, March 1955.

Age (in years)	Male					Female				
	Single	Married	Widowed	Divorced	Total ¹	Single	Married	Widowed	Divorced	Total ¹
Under 20 ²	3.4	1.6	2.0	2.3	3.4	2.6	1.0	4.8	1.6	2.6
20-24.....	2.2	1.5	5.7	3.4	1.9	1.2	.9	3.4	1.7	1.1
25-34.....	3.6	1.7	8.6	5.8	2.2	2.2	1.2	4.1	2.6	1.1
35-44.....	8.5	3.6	12.1	11.8	4.3	3.9	2.6	6.2	4.5	2.2
45-54.....	17.8	9.3	21.6	23.2	10.7	7.0	5.7	10.3	8.1	6.6
55-59.....	30.0	17.8	30.4	36.5	20.0	11.5	10.2	14.8	13.8	11.1
60-64.....	41.0	25.8	39.5	48.6	29.0	16.6	15.7	20.7	21.1	17.7
65-69.....	55.0	36.5	50.0	66.1	41.1	24.8	23.5	28.1	33.1	26.6
70-74.....	78.8	54.3	69.1	91.9	60.4	42.3	39.0	44.8	58.2	43.3
75 and over.....	137.3	100.3	139.0	173.3	119.4	103.6	76.0	106.2	129.2	101.1
All ages ³	5.4	12.1	70.5	26.1	11.1	3.9	5.8	41.1	8.8	8.8

¹ Includes deaths for which marital status was not stated. ² Includes deaths for which age was not stated. ³ "Total" and "Single" are based on deaths and population at ages 0-19 years. Rates for "Married," "Widowed," and "Divorced" are based on deaths and population at ages 15-19 years. NOTE: Rates are per 1,000 population in each specified group enumerated in the Census of April 1, 1950. Deaths among armed forces overseas are excluded.

Average Annual Accidental Death Rates, 1954-55

(Rates are per 100,000 population by place of residence)

Statistical Bulletin of the Metropolitan Life Insurance Company. Compiled from various reports by the
 Department of Vital Statistics.

	Acci- dents, total	Motor vehicles	Falls	Burns and confla- grations	Drown- ings	Fire- arms	Ma- chinery	Poison- ing by solids and liquids	Absorp- tion of poison- ous gas	Water trans- port
	62.5	27.3	7.3	7.7	3.5	2.1	1.3	1.1	.3	1.5
	145.5	14.4	6.7	11.0	9.6	6.7	2.4	2.9	1.0	22.0
	73.5	36.1	7.0	5.9	5.2	1.9	1.0	1.9	.6	.3
	65.3	24.7	8.2	8.7	3.7	2.8	2.2	.9	.3	1.3
	54.4	27.0	7.9	3.3	3.0	.9	.8	1.6	.8	.8
	62.9	26.7	12.4	2.9	2.9	2.3	1.8	1.1	.5	.6
	46.0	14.2	15.1	2.6	2.7	.4	.6	1.0	1.0	1.0
	59.1	24.6	10.1	5.3	4.4	.7	1.5	1.4	.5	2.5
	50.3	13.2	18.9	4.3	2.3	.3	.2	1.0	.3	.9
	64.6	27.5	9.8	4.6	5.4	2.4	1.0	1.3	.7	1.7
	64.3	28.2	7.3	7.1	3.5	2.6	1.5	1.4	.4	1.2
	38.9	11.4	*	*	*	*	*	*	*	*
	79.4	34.5	9.0	4.3	4.6	3.9	4.6	.9	.8	1.7
	50.3	20.7	11.9	3.6	2.7	1.2	1.2	.7	.8	.6
	61.9	25.9	15.7	4.4	2.7	1.3	1.3	.7	.8	.6
	62.9	23.7	17.2	3.6	2.5	1.0	3.0	.3	.5	.8
	71.9	29.5	13.4	5.3	2.6	1.6	2.1	.5	.9	.4
	68.0	27.4	13.2	6.3	3.5	2.3	1.5	.9	.6	.6
	60.2	22.2	8.7	6.7	5.3	2.0	1.5	.9	.3	2.9
	58.0	18.4	12.6	5.5	4.2	1.6	1.5	.8	1.6	2.8
	50.2	18.7	11.5	4.4	3.1	1.0	.9	.8	.5	1.2
	54.8	13.1	25.9	3.5	2.7	.5	.6	.7	.8	.6
	57.1	28.3	11.4	3.2	3.1	.9	1.0	.5	.7	1.3
	54.1	21.0	13.8	3.0	3.0	.9	2.1	.7	.9	1.3
	63.1	23.3	6.9	9.9	4.5	3.3	1.5	1.0	.1	1.2
	66.9	25.1	16.8	5.0	2.4	2.1	1.9	.9	.5	.8
	90.1	36.7	14.8	5.1	5.2	3.6	3.4	.9	2.2	1.6
	62.4	24.6	14.1	3.6	2.6	1.4	2.9	.6	.4	.4
	93.9	47.1	10.2	4.9	4.5	3.8	.7	1.6	.7	.3
	52.8	17.2	16.1	4.6	3.6	.8	1.1	1.0	.6	.8
	41.6	14.4	12.7	3.3	2.6	.4	.5	.5	1.0	.6
	77.0	37.3	5.9	4.3	3.9	4.0	1.8	1.4	1.3	.5
	44.2	14.2	15.4	3.0	2.6	.5	.6	.5	1.1	.6
	59.2	26.7	6.8	5.5	3.9	1.8	1.2	1.2	.3	1.4
	63.0	25.8	11.5	3.3	3.6	2.2	3.9	.5	.9	.8
	55.0	23.2	15.1	3.5	2.2	.7	1.1	.6	1.1	.7
	68.1	26.9	11.5	5.5	3.6	2.2	1.4	.8	.9	.4
	64.2	25.8	9.6	3.9	4.2	1.9	2.7	.9	1.3	1.9
	50.7	17.0	16.5	3.4	2.1	.8	1.1	.7	1.0	.5
	44.0	10.7	18.3	2.7	3.0	.4	.3	.9	.6	2.0
	60.3	26.8	5.3	7.2	4.0	2.6	1.2	1.6	.3	1.2
	67.9	27.5	11.7	3.3	4.0	2.4	3.6	.6	.9	.8
	54.3	24.9	8.6	4.9	2.8	1.9	1.3	.8	.4	1.0
	62.6	29.7	7.7	5.3	4.1	2.2	1.4	.9	.5	.7
	59.4	25.9	10.3	1.9	2.6	2.9	1.4	.8	.4	.5
	55.4	18.3	14.8	3.2	4.2	1.4	2.3	.5	.8	1.9
	56.6	22.5	9.0	6.5	3.4	1.6	1.0	1.2	.4	1.2
	58.8	20.1	12.6	4.1	4.2	1.3	1.4	1.1	1.5	1.6
	59.7	19.8	10.1	5.2	3.6	2.6	1.8	.8	1.1	.6
	53.6	24.1	12.6	2.3	3.1	1.0	1.8	.5	.6	1.4
	86.2	38.2	10.2	4.9	4.2	4.5	3.5	.7	2.5	.7
	56.4	22.8	12.3	4.4	3.1	1.4	1.2	.9	.8	.9

Crude Death Rate for Selected Countries, 1938, 1953, 1955, 1959²

Source: Statistical Office of the United Nations.

Country	Rate ¹				Country	Rate ¹		
	1938	1953	1955	1959 ²		1938	1953	1955
North America					Europe (contd)			
Canada.....	9.7	8.6	8.2	8.1	Hungary.....	14.3	11.7	10.0
Costa Rica.....	17.7	11.7	10.5	...	Ireland.....	13.6	11.7	12.6
El Salvador.....	19.1	14.7	14.2	11.7	Italy.....	14.1	10.0	9.3
Mexico.....	22.9	15.9	13.7	11.6	Luxemburg.....	12.7	12.5	11.3
Nicaragua.....	14.5	10.2	9.2	...	Netherlands.....	8.5	7.7	7.6
Panama ⁴	14.2	9.2	9.2	9.0	Norway.....	9.9	8.5	8.5
Puerto Rico.....	18.7	8.1	7.2	6.8	Portugal.....	15.4	11.3	11.3
United States.....	10.6 ³	9.6	9.3	9.4	Rumania.....	19.1	11.6	9.7
South America					Spain.....	19.3	9.7	9.4
Chile.....	23.1	12.4	13.0	...	Sweden.....	11.5	9.7	9.5
Peru ⁶	16.2	12.2	11.8	6.3	Switzerland.....	11.6	10.2	10.1
Venezuela ⁶	18.3	9.9	10.3	...	United Kingdom.....	11.8	11.4	11.7
Europe					Asia			
Austria.....	14.0	12.0	12.2	12.4	Ceylon.....	21.0	10.7	10.8
Belgium.....	13.2	12.1	12.3	11.8	India ⁸	23.7	14.5	11.7
Bulgaria.....	13.7	9.3	9.1	...	Israel.....	8.1 ⁹	6.7 ¹⁰	6.1 ¹¹
Czechoslovakia.....	13.2	10.5	9.6	9.7	Japan ¹¹	17.7	8.9	7.8 ¹²
Denmark.....	10.3	9.0	8.7	9.4	Other			
Finland.....	12.8 ⁷	9.6	9.3	8.8	Australia ¹³	9.6	9.1	8.9
France.....	15.8	13.1	12.2	11.2	New Zealand ¹⁴	9.7	8.8	9.0
Germany, West.....	11.4	11.2 ⁵	11.0	10.8	U. of So. Africa ¹⁵	9.5	8.6	8.1

¹ Number of deaths per 1,000 population. ² Provisional. ³ Excluding Alaska and Hawaii. ⁴ Excluding Indians. Figures for 1953, 1955 and 1959 include Indians in Bogasdel, Toro and Darien Provinces. ⁵ Official rate. ⁶ Excluding Indian jungle population. ⁷ Finnish nationals in Finland only. ⁸ Data are for a changing group of States and Territories which, in 1955, had a population of about 217 million. ⁹ Jewish population only. ¹⁰ Excluding Bedouin population in the Negev. ¹¹ Japanese nationals in Japan only. ¹² Including Amami Islands. ¹³ Excluding full-blooded aborigines. ¹⁴ Excluding Maoris. ¹⁵ White population only (about 20% of total). NOTE: (...) indicate information is not available.

Transportation-Accident Death Rates, 1957-59

Source: National Safety Council.

Kind of transportation	1959			1957-59 average death rate ¹
	Passenger miles	Passenger deaths	Death rate ¹	
Passenger automobiles and taxis.....	1,080,000,000,000	24,800 ²	2.3	2.4
Buses.....	51,400,000,000	100	0.18	0.19
Railroad passenger trains.....	22,050,000,000	12	0.05	0.13
Scheduled air transport planes (domestic).....	30,320,000,000	209	0.69	0.43

¹ Per 100,000,000 passenger miles. ² Drivers of passenger automobiles are considered passengers.

One Accidental Death Every 6 Minutes

Source: National Safety Council.

The nation's 1959 accident totals can be figured at the following approximate rates:

Class of accident	One every	Class of accident	One every
All accidents	Deaths 6 minutes	Workers off-job	Deaths 18 minutes
Motor-vehicle	Injuries 3 seconds	Home	Injuries 14 seconds
Work	Deaths 14 minutes	Public non-motor-vehicle	Deaths 20 minutes
	Injuries 23 seconds		Injuries 8 seconds
	Deaths 38 minutes		Deaths 32 minutes
	Injuries 16 seconds		Injuries 15 seconds

Motor-Vehicle Deaths by Type of Accident, 1913 to 1959

Source: National Safety Council.

Deaths from collisions with—							Deaths from non-collision accidents*	Total deaths†
Pedestrians	Other motor vehicles	Railroad trains	Street cars	Other vehicles	Fixed objects*			
.....	.....	.....	.....	.....	.....	.....	.....	4,200
.....	.....	.....	.....	.....	.....	.....	.....	18,400
11,420	4,310	2,140	570	950	540	8,070	.....	28,000
12,840	6,470	1,437	318	710	900	8,680	.....	31,363
12,850	8,900	1,490	165	890	940	7,350	.....	32,582
9,900	5,300	1,448	171	610	700	5,690	.....	23,823
9,950	10,200	1,474	83	600	1,000	8,950	.....	32,259
9,100	11,250	1,541	89	560	1,300	10,950	.....	34,763
8,700	12,600	1,506	26	550	1,500	13,050	.....	37,955
8,200	13,000	1,490	15	550	1,600	13,550	.....	38,426
7,950	13,650	1,377	11	590	1,600	14,450	.....	39,268
7,900	13,500	1,376	13	610	1,650	13,650	.....	38,702
7,800	12,600	1,207	10	580	1,700	13,100	.....	37,000
7,750	15,100	1,135	5	560	1,650	11,600	.....	37,800

Allocation of deaths allocated to fixed-object collisions and noncollision accidents is different from that reported in State reports generally indicate that many accidents involving no collision on the roadway are classified as collisions because the motor vehicle collides with an object after leaving the roadway.

Do not quite equal the sum of the various types because the estimates were generally made only to the nearest 50 deaths for certain types.

Motor-Vehicle Traffic Deaths by States, 1957-59

Source: National Safety Council.

	1958	Rate ¹	1959	Rate ¹	State	1958	Rate ¹	1959	Rate ¹
.....	852	7.5	831	7.0	Montana.....	193	5.9	248	7.2
.....	30	...	34	...	Nebraska.....	348	5.4	341	5.0
.....	509	9.2	516	8.5	Nevada.....	140	8.1	180	9.5
.....	445	6.7	458	6.5	New Hampshire.....	101	4.3	122	5.1
.....	3,510	5.6	3,588	5.3	New Jersey.....	754	3.3	762	3.1
.....	396	5.5	404	5.2	New Mexico.....	408	8.7	455	8.7
.....	251	2.8	248	2.6	New York.....	2,118	4.8	2,222	4.8
.....	84	4.3	83	4.0	North Carolina.....	1,083	6.5	1,193	6.8
.....	62	2.6	61	2.5	North Dakota.....	154	6.1	163	6.8
.....	1,134	6.0	1,113	5.5	Ohio.....	1,817	4.9	1,834	4.7
.....	973	6.4	990	6.2	Oklahoma.....	667	6.5	641	5.9
.....	...	...	95	...	Oregon.....	448	5.8	492	6.1
.....	270	9.0	222	7.1	Pennsylvania.....	1,654	4.3	1,685	4.4
.....	1,886	5.3	1,795	5.0	Rhode Island.....	74	2.5	91	3.0
.....	1,059	5.3	1,125	5.3	South Carolina.....	611	7.3	683	7.7
.....	598	5.1	679	5.6	South Dakota.....	240	8.5	222	6.2
.....	554	5.8	567	5.7	Tennessee.....	719	5.6	771	5.6
.....	789	7.7	750	6.9	Texas.....	2,342	5.4	2,453	5.4
.....	845	7.8	803	7.2	Utah.....	193	5.2	205	5.2
.....	205	5.3	136	3.4	Vermont.....	77	5.1	89	5.7
.....	508	4.9	524	4.8	Virginia.....	861	5.7	850	5.2
.....	592	3.6	557	3.3	Washington.....	575	5.3	548	4.8
.....	1,382	4.7	1,467	4.8	West Virginia.....	387	6.5	398	6.6
.....	710	5.2	664	4.9	Wisconsin.....	823	5.7	821	5.5
.....	548	7.4	548	6.9	Wyoming.....	137	6.9	169	8.1
.....	978	5.3	990	5.1					

Deaths per 100,000,000 vehicle-miles. NOTE: Figures are per state traffic authorities and indicate rate rather than of death.

English Language Daily and Sunday U. S. Newspapers

(as of Sept. 30, 1959)

Source: Editor & Publisher.

State	Morning papers & circulation		Evening papers & circulation		Total M & E & circulation		Sunday papers & circulation
Alabama.....	3	200,621	15	454,663	18	655,284	14
Alaska.....	0		6	49,465	6	49,465	1
Arizona.....	3	155,387	9	142,865	12	298,252	5
Arkansas.....	6	141,025	29	233,979	35	375,004	12
California.....	18	1,959,508	110	2,951,448	128	4,910,956	28
Colorado.....	4	205,870	21	401,909	25	607,779	8
Connecticut.....	6	212,839	19	563,104	25	775,943	6
Delaware.....	1	30,216	2	81,837	3	112,053	0
District of Columbia.....	1	393,718	2	436,468	3	830,186	2
Florida.....	13	892,003	30	597,667	43	1,489,670	30
Georgia.....	6	398,276	24	517,871	30	916,147	11
Hawaii.....	1	51,424	4	135,881	5	187,305	2
Idaho.....	4	67,676	12	77,907	15	145,583	5
Illinois.....	10	1,836,457	74	2,022,834	84	3,859,291	18
Indiana.....	9	431,895	78	1,174,218	87	1,606,113	18
Iowa.....	4	354,578	41	354,177	45	938,755	9
Kansas.....	4	205,209	49	511,885	52	717,094	14
Kentucky.....	7	422,202	21	532,763	27	854,965	13
Louisiana.....	4	344,484	14	377,546	18	722,030	8
Maine.....	5	189,110	4	53,616	9	242,726	1
Maryland.....	4	229,398	8	533,663	12	763,061	3
Massachusetts.....	6	880,877	45	1,476,201	51	2,357,078	8
Michigan.....	1	498,912	53	1,872,659	54	2,371,571	12
Minnesota.....	5	379,921	26	685,907	31	1,065,828	5
Mississippi.....	3	71,730	16	208,007	19	279,737	7
Missouri.....	7	755,417	46	1,087,086	53	1,842,503	13
Montana.....	4	94,600	14	71,783	18	166,383	10
Nebraska.....	3	163,825	17	295,236	20	459,061	4
Nevada.....	2	31,154	6	52,848	8	84,002	3
New Hampshire.....	1	23,255	9	96,955	9	120,210	1
New Jersey.....	5	410,714	21	974,169	26	1,384,883	10
New Mexico.....	2	49,911	17	131,131	19	181,042	15
New York.....	22	4,842,606	68	3,623,951	90	8,466,557	20
North Carolina.....	9	535,250	38	541,745	47	1,076,995	15
North Dakota.....	2	34,436	9	124,321	11	158,757	2
Ohio.....	8	766,966	88	2,340,934	96	3,108,910	20
Oklahoma.....	7	304,874	44	419,980	51	724,854	40
Oregon.....	4	273,393	17	357,883	21	631,276	7
Pennsylvania.....	27	1,384,993	97	2,818,512	122	4,203,505	14
Rhode Island.....	1	58,872	6	233,336	7	292,208	2
South Carolina.....	8	334,497	9	143,272	17	477,769	7
South Dakota.....	1	2,974	11	160,427	12	163,401	4
Tennessee.....	7	473,023	22	553,983	29	1,027,006	12
Texas.....	22	1,180,911	91	1,666,780	113	2,847,691	80
Utah.....	1	101,802	4	139,662	5	241,464	4
Vermont.....	2	51,751	7	34,365	9	86,116	1
Virginia.....	9	393,045	22	476,928	31	869,973	12
Washington.....	6	332,022	21	616,849	27	948,871	10
West Virginia.....	9	232,801	21	256,825	30	489,626	8
Wisconsin.....	3	252,710	35	880,662	38	1,133,372	6
Wyoming.....	6	36,698	3	31,594	9	68,292	4
Total U. S., Sept. 30, 1959.....	306	23,547,046	1,455	34,752,677	1,755	58,299,723	564
Total U. S., Sept. 30, 1958.....	308	23,206,964	1,460	34,387,490	1,756	57,594,454	558
Total U. S., Sept. 30, 1957 ¹	309	23,170,552	1,453	34,634,893	1,755	57,805,445	544
Total U. S., Sept. 30, 1956 ²	314	22,491,500	1,454	34,610,010	1,761	57,101,510	546
Total U. S., Sept. 30, 1955 ²	316	22,183,408	1,454	33,963,951	1,760	56,147,359	541
Total U. S., Sept. 30, 1954 ²	317	21,705,436	1,448	33,367,044	1,765	55,072,480	544
Total U. S., Sept. 30, 1953 ²	327	21,412,474	1,458	33,059,812	1,785	54,472,286	544

¹ "All-day" newspapers are listed in morning and evening figures. Adjustments have been made in state and U. S. total figures. ² Excludes newspapers in morning and evening figures. Adjustments have been made in state and U. S. total figures. * Excludes newspapers in morning and evening figures. Adjustments have been made in state and U. S. total figures.

U. S. Daily Newspapers

Source: Audit Bureau of Circulations: Publishers' Statements for 6-mo. period ending Mar. 31, 1960.

Where two or more newspapers are listed under a city, the order is according to size of total daily circulation.)

City and newspaper	Net Paid Circulation		
	Morning ¹	Evening ¹	Sunday
io): BEACON JOURNAL.....	.....	167,407	178,247
Y.): TIMES-UNION.....	67,689	.....	119,614
ONSTITUTION (M); JOURNAL (E); JOURNAL & CONSTITUTION (S)	200,314	262,679	511,131
SUN.....	194,823 ²	220,272 ²	320,877
OST (E); AMERICAN (S).....	.....	231,224 ²	317,430
n: POST-HERALD (M); NEWS (E & S).....	97,629	189,936	226,973
CORD (M); AMERICAN (E); ADVERTISER (S).....	355,727 ²	182,359 ²	452,425
(M & S); TRAVELER (E).....	175,440 ²	180,202 ²	298,604
.....	184,699 ²	155,372 ²	431,274
AN SCIENCE MONITOR.....	.....	172,229	.....
NEWS.....	.....	286,534 ²	.....
-EXPRESS.....	156,023	.....	305,367
(W. Va.): GAZETTE (M); DAILY MAIL (E); GAZETTE-MAIL (S).....	69,851	52,927	108,117
N. C.): OBSERVER (M & S); NEWS (E).....	160,538	64,491	178,935
TRIBUNE.....	867,940	.....	1,229,396
.....	.....	551,462 ²	.....
ES.....	543,504 ²	.....	670,127
AN.....	.....	454,941 ²	594,252
REET JOURNAL (Midwest Edition).....	204,742 ²	.....	.....
POST & TIMES-STAR.....	.....	273,148	.....
R.....	217,738	.....	280,266
PRESS & NEWS.....	.....	388,247	.....
EALER.....	308,142	.....	510,406
Ohio): DISPATCH.....	.....	207,994	278,461
VS.....	218,558	.....	231,243
ERALD.....	.....	190,292 ²	200,647
io): NEWS.....	.....	150,633	184,285
ST.....	.....	256,175 ²	337,654
OUNTAIN NEWS.....	165,065	.....	165,888
: REGISTER (M & S); TRIBUNE (E).....	228,647	129,450	525,072
WS.....	.....	480,673	640,079
ESS.....	482,850	.....	521,947
.....	.....	373,295	454,589
STAR-TELEGRAM.....	108,797	136,500	213,500
if.): BEE.....	.....	108,046	127,854
ls (Mich.): PRESS.....	.....	124,170	83,671
(N. C.): NEWS (M & S); RECORD (E).....	89,481	29,673	101,288
(Pa.): PATRIOT (M); NEWS (E); PATRIOT-NEWS (S).....	40,423	77,152	151,167
onn.): TIMES.....	.....	124,835	.....
.....	110,581	.....	153,611
STAR-BULLETIN.....	.....	103,180 ²	110,861
OST.....	215,063	.....	232,101
LE.....	.....	199,128 ²	226,490
.....	.....	102,590 ²	.....
: STAR (M & S); NEWS (E).....	210,197	164,031	338,876
.....	.....	89,093	101,262
(Fla.): TIMES-UNION (M & S); JOURNAL (E).....	171,648	53,235	174,787
(Mo.): TIMES (M); STAR (E & S).....	332,817	337,627	361,301
NEWS-SENTINEL.....	.....	102,960	141,317
DEMOCRAT.....	.....	88,484	104,454
AS GAZETTE.....	87,869	.....	99,968
(Calif.): INDEPENDENT PRESS-TELEGRAM.....	39,684	113,279	143,013
: TIMES.....	523,626	.....	913,042
R.....	374,776	.....	693,163
& EXPRESS.....	.....	361,291 ²	.....
NEWS.....	.....	312,238 ²	.....
COURIER-JOURNAL (M & S); TIMES (E).....	217,700	173,584	317,449
COMMERCIAL APPEAL (M & S); PRESS SCIMITAR (E).....	217,719	149,424	261,174
ALD.....	321,461	.....	383,206
.....	.....	147,162 ²	125,919
JOURNAL.....	.....	375,950	513,647
SENTINEL.....	185,106	.....	224,199

otherwise indicated, figure is an average of the Monday-through-Saturday circulation. ² Figure is an average of the Monday-through-Friday circulation; i.e., Saturday circulation, if any, has not been used in making

¹ Post office address is Garden City, N. Y.

City and newspaper	Net Paid Circulation		
	Morning ¹	Evening ¹	Sunday
Minneapolis: TRIBUNE (M & S); STAR (E)	225,436	301,719	662,070
Nashville: TENNESSEAN (M & S); BANNER (E)	126,156	102,455	203,000
Nassau County (Long Island, N. Y.): NEWSDAY		317,217	
New Orleans: TIMES-PICAYUNE (M & S); STATES & ITEM (E)	199,051	167,371 ²	320,730
New York City: NEWS	2,003,758 ²		3,413,300
MIRROR	827,231 ²		1,290,000
TIMES	686,246 ²		1,371,000
JOURNAL-AMERICAN		607,000 ²	803,100
WORLD-TELEGRAM & SUN		464,205 ²	
POST		335,840 ²	278,700
HERALD TRIBUNE	352,490 ²		521,500
LONG ISLAND PRESS (Jamaica, N. Y.)		302,368	391,100
WALL STREET JOURNAL (Eastern Edition)	275,194		
STAR-JOURNAL (Long Island City)		103,270	
Newark (N. J.): NEWS		282,204 ²	392,200
STAR-LEDGER	234,220 ²		398,000
Norfolk-Portsmouth-South Norfolk: VIRGINIAN PILOT (M); NORFOLK LEDGER-DISPATCH & PORTSMOUTH STAR (E); VIRGINIAN PILOT & PORTSMOUTH STAR (S)	109,139	94,904	142,700
Oakland (Calif.): TRIBUNE		214,002	245,000
Oklahoma City: OKLAHOMAN (M & S); TIMES (E)	158,852	116,233	245,200
Omaha: WORLD-HERALD	126,385	123,728	261,700
Orlando (Fla.): SENTINEL (M & S); STAR (E)	81,143	29,225	108,700
Philadelphia: BULLETIN		707,823 ²	710,300
INQUIRER	606,823 ²		1,041,700
NEWS		260,613 ²	
Phoenix: REPUBLIC (M & S); GAZETTE (E)	132,490	84,105	197,700
Pittsburgh: PRESS		315,156	549,700
POST-GAZETTE	266,146		
SUN-TELEGRAPH		168,961	377,900
Portland (Maine): PRESS-HERALD (M); EXPRESS (E); TELEGRAM (S)	51,723	28,686	96,800
Portland (Oreg.): OREGONIAN	242,686		309,700
OREGON JOURNAL		190,130 ²	211,100
Providence (R. I.): JOURNAL (M & S); BULLETIN (E)	59,253	144,591	191,700
Raleigh (N. C.): NEWS & OBSERVER (M & S); TIMES (E)	125,160	22,962	138,300
Richmond (Va.): TIMES-DISPATCH (M & S); NEWS-LEADER (E)	138,813	114,715	186,600
Rochester (N. Y.): DEMOCRAT & CHRONICLE (M & S); TIMES-UNION (E)	125,898	130,056	184,100
Sacramento: BEE		160,306	161,100
St. Louis: POST-DISPATCH		396,212 ²	567,700
GLOBE-DEMOCRAT	325,832 ²		348,300
St. Paul: PIONEER PRESS (M & S); DISPATCH (E)	94,800	125,219	188,300
St. Petersburg (Fla.): TIMES	119,538		121,100
Salt Lake City: TRIBUNE (M & S); DESERET NEWS-SALT LAKE TELEGRAM (E)	101,479	87,792	186,300
San Antonio: EXPRESS (M); NEWS (E); EXPRESS-NEWS (S)	68,771 ²	79,743 ²	113,300
LIGHT		110,683 ²	130,700
San Diego: EVENING TRIBUNE		125,881	
UNION	101,797		209,300
San Francisco: EXAMINER	278,978		474,400
CHRONICLE	266,895		314,400
CALL-BULLETIN		212,136 ²	
WALL STREET JOURNAL (Pacific Coast Edition)	107,668 ²		
Seattle: TIMES		223,782 ²	252,200
POST-INTELLIGENCER	211,494 ²		249,900
Shreveport (La.): TIMES (M & S); JOURNAL (E)	89,682	51,676	111,100
South Bend-Mishawaka (Ind.): TRIBUNE		112,117	115,300
Spokane (Wash.): SPOKESMAN-REVIEW	88,851		138,300
Syracuse (N. Y.): HERALD-JOURNAL (E); HERALD-AMERICAN (S)		130,593	202,200
POST-STANDARD	100,221 ²		102,200
Tampa (Fla.): TRIBUNE (M & S); TIMES (E)	147,684	44,310	166,600
Toledo: BLADE		183,580 ²	179,900
Tulsa (Okla.): WORLD (M & S); TRIBUNE (E)	95,929	74,777	151,100
Washington (D. C.): POST & TIMES HERALD	401,736 ²		460,000
EVENING STAR: SUNDAY STAR		273,405 ²	310,000
NEWS		177,892 ²	
Wichita (Kans.): EAGLE	106,187	77,004	124,100
BEACON		94,434	121,100
Worcester (Mass.): TELEGRAM (M & S); GAZETTE (E)	57,090	94,844	103,300
Youngstown (Ohio): VINDICATOR & TELEGRAM		103,179	150,000

Leading Magazines: United States and Canada

Source: Audit Bureau of Circulations: Publishers' Statements for 6-month period ending Dec. 31, 1959.

Magazine	Circulation ¹	Magazine	Circulation ¹
African Girl (M)	721,494	National Geographic Magazine (M)	2,399,152
African Home (M)	3,664,921	Nation's Business (M)	762,333
Asa (M)	1,360,567	Newsweek (W)	1,295,773
Best Homes & Gardens (M)	4,874,007	Outdoor Life (M)	1,076,262
Life (M)	1,920,362	Parents' Magazine (M)	1,815,366
Elaine—The Canadian Home		Photoplay (M)	1,437,664
Journal (M) ²	745,589	Playboy (M)	993,275
Identical (BM)	647,963 ³	Popular Mechanics (M)	1,326,042
Net (M)	3,109,813	Popular Science Monthly (M)	1,261,989
Metropolitan (M)	895,613	Reader's Digest (M)	12,011,389
My (M)	578,977	Reader's Digest (Canadian English	
Fire (M)	845,923	Edition) (M) ²	804,195
Woman's Family Circle (M)	5,116,305	Redbook Magazine (M)	2,980,079
Stream (M)	1,089,385	Saturday Evening Post (W)	6,227,075
Hour (M)	800,599	Science & Mechanics (BM)	561,823
Housekeeping (M)	4,646,418	Secrets (M)	556,313
(W)	773,714	Seventeen (M)	1,103,272
Day (M)	944,126	Sport (M)	542,811
Rod Magazine (M)	556,732	Sports Afield (M)	1,082,102
Home & Garden (M)	726,278	Sports Illustrated (W)	899,155
Beautiful (M)	807,708	Stag (M)	483,484
Home Journal (M)	5,986,727	Sunset (M)	639,056
City (M) ²	588,198	'Teen (M)	487,731
(W)	6,448,215	Time (W)	2,397,509
g for Young Homemakers (M)	688,948	True (M)	2,353,549
(BW)	5,881,787	True Confessions (M)	1,251,591
ean's Magazine (BW) ²	505,195	True Romance (M)	553,416
moiselle (M)	507,537	True Story (M)	2,542,825
(M)	456,970	TV Guide (all editions) (W)	6,831,177
ill's (M)	5,726,103	TV Radio Mirror (M)	737,472
anix Illustrated (M)	1,045,284	U. S. News & World Report (W)	1,149,965
rn Romances (M)	1,148,923	Woman's Day (M)	4,247,195
rn Screen (M)	1,216,488	Workbasket (M)	1,071,590
on Picture (M)	1,095,143		

Average total paid circulation for the 6-month period indicated above. This table lists weekly, biweekly, monthly (monthly magazines of more than 450,000 circulation, but excludes official organs of associations and religious or political magazines. ² Canadian publication. ³ For period Sept. 1-Dec. 31, 1958. NOTE: W—weekly; BW—biweekly; M—monthly; BM—bimonthly.

Radio and Television Stations and Networks

Source: National Association of Broadcasters.

Major networks	Standard broadcast stations (May 1, 1960)		TV Stations (May 1, 1960)
	Owned and operated	Affiliated	Owned and operated
American Broadcasting Company	6	358	5
Columbia Broadcasting System	7	211	5
Mutual Broadcasting System .....	..	422	..
National Broadcasting Company	6	201	5

Number of stations* (May 1, 1960)	Operating	Permits for construction	Total
Standard broadcast	3,469	84	3,553
Frequency modulation)	717	161	878
Television	576	76	652

*Including territories and possessions.

Patents

Source: Patent Office.

A patent, in the most general sense, is a document issued by a government, conferring some special right or privilege. The term is now restricted mainly to patents for inventions; occasionally, land patents.

The grant of a patent for an invention gives the inventor the privilege, for a limited period of time, of excluding others from practicing a certain art or from making, using, or selling a certain article. However, it does not give him the right to make, use, or sell his own invention if it is an improvement on some unexpired patent whose claims are infringed thereby.

In the U. S., the law provides that a patent may be granted, for a term of 17 years, to any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, as well as any new and useful improvements thereof. A patent may also be granted to a person who has invented or discovered and asexually reproduced a new and distinct variety of plant (other than a tuber-propagated one) or has invented a new, original and ornamental design for an article of manufacture.

A patent is granted only upon a regularly

filed application, complete in all respects upon payment of the fees; and upon determination that the disclosure is complete and that the invention is new and useful. The disclosure must be of such nature as to enable others to reproduce the invention.

A complete application, which must be addressed to the Commissioner of Patents, Washington, D. C., consists of a petition, specification, and claims, oath, drawing (whenever the nature of the case admits of it) and a filing fee of \$30 for cases having 20 claims or less. An additional fee of \$30 per claim is required for cases having more than 20 claims. The filing fee is not returned to the applicant if the patent is refused. If a patent is allowed, another fee of \$30 (and each for claims allowed in excess of 20) is required before the patent is issued. These fees for design patents vary.

Applications are considered in the order in which they are received. Patents are granted for printed matter, for methods of doing business, or for devices for various claims contrary to natural laws are refused. Applications for a perpetual-motion machine have been made from time to time, but a working model is presented that actually fulfills the claim, no patent will be issued.

Trademarks

Source: Patent Office.

A trademark may be defined as a word, letter, device, or symbol, as well as some combination of these, which is used in connection with merchandise and which points distinctly to the origin or ownership of it.

Certificates of registration of trademarks are issued under the seal of the Patent Office and may be registered by the owner if he is engaged in interstate or foreign commerce, since any Federal jurisdiction over trademarks arises under the commerce clause of the Constitution. Trademarks may be registered by foreign owners who comply with our law, as well as by citizens of foreign countries with which the U. S. has treaties relating to trademarks. American citizens may register trademarks in foreign

countries by complying with the laws of those countries. The right to register and protection of trademarks in many foreign countries is guaranteed by treaties.

General jurisdiction in trademark cases is given to the Federal courts. Decisions of the Patent Office examiners on applications or oppositions may be subject to appeal to the Trademark Board and Appeal Board and from it to the Court of Customs and Patent Appeals. Before adopting a trademark, a person should make a search of prior marks in order to avoid infringing unwittingly upon those already in use.

The duration of a trademark registration is 20 years, but it may be renewed indefinitely for 20-year periods, provided the mark is still in use at the time of expiration.

Television Statistics

Source: ELECTRONIC TECHNICIAN Magazine.

Year	TV sets mfd.	Retail value	Picture tubes mfd.	Retail value	TV stations	Homes with TV*	TV use in
1946.....	10,000	\$ 5,000,000	20,000	\$ 1,000,000	5	8,000	
1947.....	250,000	100,000,000	300,000	15,000,000	20	250,000	22
1948.....	1,000,000	350,000,000	1,500,000	75,000,000	48	1,000,000	1,000,000
1949.....	3,000,000	950,000,000	3,500,000	210,000,000	100	4,000,000	4,000,000
1950.....	7,500,000	2,200,000,000	8,000,000	400,000,000	107	10,400,000	10,500,000
1951.....	5,600,000	1,800,000,000	6,000,000	300,000,000	108	15,500,000	15,700,000
1953.....	7,300,000	1,675,000,000	9,900,000	360,000,000	350	26,000,000	28,000,000
1957.....	6,400,000	1,050,000,000	13,100,000	410,000,000	521	39,500,000	47,200,000
1958.....	5,100,000	900,000,000	12,500,000	380,000,000	546	42,800,000	50,300,000
1959.....	6,400,000	1,100,000,000	13,000,000	400,000,000	570	44,000,000	52,000,000

* Includes dwellings such as apartment hotels.

Copyrights

Source: Copyright Office.

Copyright is a statutory right obtained by authors, musicians, and artists or their heirs, upon compliance with the provisions of the copyright law, to prevent the reproduction of their works without their consent. The U. S. Constitution (Article I, Section 8) empowers Congress "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The copyright owner possesses the exclusive right to print, reprint, publish, copy, and vend the copyrighted work. Among some of the other rights reserved by the copyright owner are the exclusive rights to translate and dramatize literary works, to control public performance of dramas, and, in the case of nondramatic literary works and musical compositions, to control public performance for profit. Special provisions in regard to mechanical reproduction of musical compositions are included. Copyright protection extends to books; pamphlets; periodicals and contributions to periodicals; lectures, sermons, and monographs; dramas and dramatico-musical compositions; musical compositions; maps; works of art or models and designs for works of art; reproductions of a work of art; drawings; scientific works of scientific or technical character; photographs; prints and pictorial reproductions; commercial prints and labels; motion pictures.

Copyright term endures 28 years from date of registration in the Copyright Office for unpublished material and from the date of publication for published works. The copyright may be renewed for an additional term of 28 years, provided application for renewal is made within one year prior to the date of expiration of the original term. Copyright of a book or similar publications secured by publication of such work by printing on the title page, or the page immediately following, the required copyright notice. This notice consists of the word "Copyright," the abbreviation *Copr.* or the symbol ©, the name of the copyright owner, and the year date of publication. It is important to bear in mind that copyright comes into being at the time of first publication if required notice appears on the work. If publication occurs without this notice, the work falls into the public domain, and the

Copyright Office cannot register the claim. In short, the Copyright Office does not grant copyrights; the obtaining of such protection depends on whether or not the claimant follows the statutory formalities at the time of publication. In view of the fact that those formalities vary with the different classes of works subject to copyright, persons interested in securing copyright should obtain circular No. 35 from the Register of Copyrights, Library of Congress, Washington 25, D. C.

The law requires that, promptly after the work has been published, two copies thereof (foreign works, one copy) must be promptly deposited in the Copyright Office. These copies should be accompanied by the proper application form and the statutory fee of \$4. If the work is a commercial print or label published in connection with the sale or advertisement of an article of merchandise, the fee is \$6.

Effective June 3, 1949, the term of ad interim protection for books and periodicals in the English language first published abroad was extended to five years. Such works may be imported into the U. S. up to a total of 1,500 copies after ad interim registration has been obtained. The above amendment to the law also affords to foreign authors and publishers an option of obtaining registration without payment of the usual statutory fee if an extra copy of the work, accompanied by a catalogue card, is submitted to the Copyright Office within six months of first publication abroad.

The Act of Aug. 31, 1954, modified a number of existing formalities, primarily with regard to certain foreign works, and was designed to implement the Universal Copyright Convention, which took effect on Sept. 16, 1955. One principal modification is that U. S. authors and publishers may use the symbol © instead of the word *Copyright* or the abbreviation *Copr.* The symbol must be accompanied by the name of the copyright owner and the year date of publication. The use of this form may obtain automatic copyright protection in countries adhering to the Universal Copyright Convention.

Application forms, etc., may be obtained free from the Copyright Office. Bulletin 14, the U. S. copyright law, can be purchased from the Register of Copyrights for 25¢.

Radio and Audio Statistics for U. S.

Source: ELECTRONIC TECHNICIAN Magazine.

Radio†		Audio	
Homes with*.....	53,700,000	Phonographs sold, 1959.....	4,600,000
Denary sets in home.....	53,000,000	Phonographs in U. S.....	3,900,000†
in business.....	13,700,000	Tape recorders sold, 1959.....	550,000
mobile radios.....	45,000,000	Tape recorders in U. S.....	3,300,000†
radios.....	165,400,000	Home hi-fi servicing.....	\$130,000,000
stations licensed.....	210,000	Hi-fi audio \$ volume.....	\$250,000,000†

Includes dwellings such as apartment hotels. † As of Jan. 1, 1960. ‡ 1959 sales.

Road Mileages Between U. S. Cities

Source: American Automobile Association.

Cities	Birmingham	Boston	Buffalo	Chicago	Cleveland	Dallas	Denver
Birmingham, Ala. ....	.....	1,223	1,130	663	751	659	1,139
Boston, Mass.	1,223	.....	463	980	651	1,728	2,343
Buffalo, N. Y.	1,130	463	.....	524	188	1,427	1,343
Chicago, Ill.	663	980	524	.....	349	1,006	1,139
Cleveland, Ohio	751	651	188	349	.....	1,139	1,343
Dallas, Tex.	659	1,728	1,427	1,006	1,139	.....	1,343
Denver, Colo.	1,379	2,025	1,562	1,038	1,351	800	.....
Detroit, Mich.	759	735	247	272	167	1,278	1,343
El Paso, Tex.	1,286	2,527	1,938	1,654	1,750	627	1,343
Houston, Tex.	742	1,965	1,549	1,173	1,361	243	1,343
Indianapolis, Ind.	508	935	488	188	302	928	1,343
Kansas City, Mo.	714	1,429	982	503	794	527	1,343
Los Angeles, Calif.	2,121	3,162	2,699	2,175	2,457	1,486	1,343
Louisville, Ky.	394	971	550	300	362	892	1,343
Memphis, Tenn.	248	1,360	958	555	765	474	1,343
Miami, Fla.	803	1,540	1,434	1,384	1,346	1,346	2,343
Minneapolis, Minn.	1,088	1,405	962	425	774	991	1,343
New Orleans, La.	357	1,580	1,392	943	1,108	490	1,343
New York, N. Y.	851	208	384	822	501	1,646	1,343
Omaha, Nebr.	926	1,472	1,010	486	835	699	1,343
Philadelphia, Pa.	759	301	393	756	426	1,576	1,343
Phoenix, Ariz.	1,699	2,834	2,245	1,816	2,057	1,040	1,343
Pittsburgh, Pa.	812	576	223	463	131	1,278	1,343
St. Louis, Mo.	548	1,196	729	300	541	676	1,343
Salt Lake City, Utah	1,890	2,427	1,964	1,440	1,789	1,270	1,343
San Francisco, Calif.	2,443	3,186	2,723	2,199	2,548	1,807	1,343
Seattle, Wash.	2,779	3,098	2,600	2,076	2,608	2,153	1,343
Washington, D. C.	624	435	407	698	368	1,399	1,343

Cities	Detroit	El Paso	Houston	Indianapolis	Kansas City	Los Angeles	Long Beach
Birmingham, Ala.	759	1,286	742	508	714	2,121	1,343
Boston, Mass.	735	2,527	1,965	935	1,429	3,162	1,343
Buffalo, N. Y.	247	1,938	1,549	488	982	2,699	1,343
Chicago, Ill.	272	1,654	1,173	188	503	2,175	1,343
Cleveland, Ohio	167	1,750	1,361	302	794	2,457	1,343
Dallas, Tex.	1,278	627	243	928	527	1,486	1,343
Denver, Colo.	1,323	725	1,043	1,051	644	1,202	1,343
Detroit, Mich. ....	.....	1,722	1,307	272	766	2,447	1,343
El Paso, Tex.	1,722	.....	736	1,450	1,039	816	1,343
Houston, Tex.	1,307	736	.....	1,035	770	1,566	1,343
Indianapolis, Ind.	272	1,450	1,035	.....	498	2,196	1,343
Kansas City, Mo.	766	1,039	770	498	.....	1,728	1,343
Los Angeles, Calif.	2,447	816	1,566	2,196	1,728	.....	1,343
Louisville, Ky.	370	1,416	999	114	524	2,183	1,343
Memphis, Tenn.	716	1,091	591	444	466	1,874	1,343
Miami, Fla.	1,407	1,998	1,288	1,274	1,526	2,832	1,343
Minneapolis, Minn.	697	1,480	1,234	611	464	2,018	1,343
New Orleans, La.	1,116	1,135	385	844	868	1,976	1,343
New York, N. Y.	636	2,161	1,593	727	1,221	3,025	1,343
Omaha, Nebr.	758	1,045	942	591	212	1,689	1,343
Philadelphia, Pa.	580	2,091	1,501	657	1,151	2,919	1,343
Phoenix, Ariz.	2,029	413	1,163	1,757	1,346	405	1,343
Pittsburgh, Pa.	287	1,793	1,394	359	853	2,621	1,343
St. Louis, Mo.	515	1,209	821	241	257	1,916	1,343
Salt Lake City, Utah	1,712	1,137	1,537	1,547	1,155	735	1,343
San Francisco, Calif.	2,471	1,221	2,019	2,306	1,914	415	1,343
Seattle, Wash.	2,531	2,078	2,449	2,262	2,047	1,177	1,343
Washington, D. C.	522	2,026	1,511	563	1,051	2,799	1,343

Road Mileages Between U. S. Cities

Source: American Automobile Association.

Cities	Memphis	Miami	Minneapolis	New Orleans	New York	Omaha	Philadelphia
Birmingham, Ala.	248	803	1,088	357	851	926	759
Boston, Mass.	1,360	1,540	1,405	1,580	208	1,472	301
Buffalo, N. Y.	958	1,434	962	1,392	384	1,010	393
Chicago, Ill.	555	1,384	425	943	850	486	756
Cleveland, Ohio	765	1,346	774	1,108	501	835	426
Dallas, Tex.	474	1,346	991	490	1,646	699	1,576
Denver, Colo.	1,131	2,182	916	1,280	1,833	552	1,763
Detroit, Mich.	716	1,407	697	1,116	636	758	580
El Paso, Tex.	1,091	1,998	1,480	1,135	2,161	1,045	2,091
Houston, Tex.	591	1,288	1,234	385	1,593	942	1,501
Indianapolis, Ind.	444	1,274	611	844	727	591	657
St. Louis City, Mo.	466	1,526	464	868	1,221	212	1,151
Los Angeles, Calif.	1,874	2,832	2,018	1,976	3,025	1,689	2,919
Louisville, Ky.	381	1,126	725	751	773	736	693
Memphis, Tenn. ....	....	1,022	863	386	1,152	678	1,060
Miami, Fla.	1,022	....	1,818	899	1,332	1,738	1,224
Minneapolis, Minn.	863	1,818	....	1,275	1,284	364	1,190
New Orleans, La.	386	899	1,275	....	1,208	1,080	1,116
New York, N. Y.	1,152	1,332	1,284	1,208	....	1,300	93
Omaha, Nebr.	678	1,738	364	1,080	1,300	....	1,230
Philadelphia, Pa.	1,060	1,224	1,190	1,116	93	1,230	....
Phoenix, Ariz.	1,474	2,411	1,742	1,548	2,474	1,378	2,534
Pittsburgh, Pa.	804	1,276	897	1,169	368	932	298
St. Paul, Mo.	301	1,269	562	701	968	469	898
Salt Lake City, Utah	1,619	2,607	1,283	1,801	2,290	954	2,184
San Francisco, Calif.	2,195	3,270	2,141	2,297	3,049	1,713	2,943
Seattle, Wash.	2,532	3,582	1,642	2,683	2,926	1,773	2,832
Washington, D. C.	925	1,111	1,132	1,150	227	1,167	135

Cities	Phoenix	Pittsburgh	St. Louis	Salt Lake City	San Francisco	Seattle	Washington
Birmingham, Ala.	1,699	812	548	1,890	2,443	2,779	624
Boston, Mass.	2,834	576	1,196	2,427	3,186	3,098	435
Buffalo, N. Y.	2,245	223	729	1,964	2,723	2,600	407
Chicago, Ill.	1,816	463	300	1,440	2,199	2,076	698
Cleveland, Ohio	2,057	131	541	1,789	2,548	2,608	368
Dallas, Tex.	1,040	1,278	676	1,270	1,807	2,153	1,399
Denver, Colo.	826	1,465	901	530	1,270	1,403	1,614
Detroit, Mich.	2,029	287	515	1,712	2,471	2,531	522
El Paso, Tex.	413	1,793	1,209	1,137	1,221	2,078	2,026
Houston, Tex.	1,163	1,394	821	1,537	2,019	2,449	1,511
Indianapolis, Ind.	1,757	359	241	1,547	2,306	2,262	563
St. Louis City, Mo.	1,346	853	257	1,155	1,914	2,047	1,051
Los Angeles, Calif.	405	2,621	1,916	735	415	1,177	2,799
Louisville, Ky.	1,783	395	267	1,679	2,438	2,547	599
Memphis, Tenn.	1,474	804	301	1,619	2,195	2,532	925
Miami, Fla.	2,411	1,276	1,269	2,607	3,270	3,582	1,111
Minneapolis, Minn.	1,742	897	562	1,283	2,141	1,642	1,132
New Orleans, La.	1,548	1,269	701	1,801	2,297	2,683	1,150
New York, N. Y.	2,474	368	968	2,290	3,049	2,926	227
Omaha, Nebr.	1,378	932	469	954	1,713	1,773	1,167
Philadelphia, Pa.	2,534	298	898	2,184	2,943	2,832	135
Phoenix, Ariz. ....	....	2,116	1,516	763	827	1,531	2,399
Pittsburgh, Pa.	2,116	....	600	1,886	2,645	2,438	235
St. Paul, Mo.	1,516	600	....	1,412	2,171	2,259	804
Salt Lake City, Utah	763	1,886	1,412	....	759	889	1,778
San Francisco, Calif.	827	2,645	2,171	759	....	874	2,885
Seattle, Wash.	1,531	2,438	2,259	889	874	....	2,673
Washington, D. C.	2,399	235	804	1,778	2,885	2,673	....

Air Distances Between U. S. Cities

Source: U. S. Coast and Geodetic Survey.

Cities	Birmingham	Boston	Buffalo	Chicago	Cleveland	Dallas	De
Birmingham, Ala. ....	.....	1,052	776	578	618	581	1,4
Boston, Mass.	1,052	.....	400	851	551	1,551	1,4
Buffalo, N. Y.	776	400	.....	454	173	1,198	1,4
Chicago, Ill.	578	851	454	.....	308	803	1,4
Cleveland, Ohio	618	551	173	308	.....	1,025	1,4
Dallas, Tex.	581	1,551	1,198	803	1,025	.....	1,4
Denver, Colo.	1,095	1,769	1,370	920	1,227	663	1,4
Detroit, Mich.	641	613	216	238	90	999	1,4
El Paso, Tex.	1,152	2,072	1,692	1,252	1,525	572	1,4
Houston, Tex.	567	1,605	1,286	940	1,114	225	1,4
Indianapolis, Ind.	433	807	435	165	263	763	1,4
Kansas City, Mo.	579	1,251	861	414	700	451	1,4
Los Angeles, Calif.	1,802	2,596	2,198	1,745	2,049	1,240	1,4
Louisville, Ky.	331	826	483	269	311	726	1,4
Memphis, Tenn.	217	1,137	803	482	630	420	1,4
Miami, Fla.	665	1,255	1,181	1,188	1,087	1,111	1,4
Minneapolis, Minn.	862	1,123	731	355	630	862	1,4
New Orleans, La.	312	1,359	1,086	833	924	443	1,4
New York, N. Y.	864	188	292	713	405	1,374	1,4
Omaha, Nebr.	732	1,282	883	432	739	586	1,4
Philadelphia, Pa.	783	271	279	666	360	1,299	1,4
Phoenix, Ariz.	1,456	2,300	1,906	1,453	1,749	887	1,4
Pittsburgh, Pa.	608	483	178	410	115	1,070	1,4
St. Louis, Mo.	400	1,038	662	262	492	547	1,4
Salt Lake City, Utah	1,466	2,099	1,699	1,260	1,568	999	1,4
San Francisco, Calif.	2,013	2,699	2,300	1,858	2,166	1,483	1,4
Seattle, Wash.	2,082	2,493	2,117	1,737	2,026	1,681	1,4
Washington, D. C.	661	393	292	597	306	1,185	1,4

Cities	Detroit	El Paso	Houston	Indianapolis	Kansas City	Los Angeles	Lo
Birmingham, Ala.	641	1,152	567	433	579	1,802	1,4
Boston, Mass.	613	2,072	1,605	807	1,251	2,596	1,4
Buffalo, N. Y.	216	1,692	1,286	435	861	2,198	1,4
Chicago, Ill.	238	1,252	940	165	414	1,745	1,4
Cleveland, Ohio	90	1,525	1,114	263	700	2,049	1,4
Dallas, Tex.	999	572	225	763	451	1,240	1,4
Denver, Colo.	1,156	557	879	1,000	558	831	1,4
Detroit, Mich. ....	.....	1,479	1,105	240	645	1,983	1,4
El Paso, Tex.	1,479	.....	876	1,264	839	701	1,4
Houston, Tex.	1,105	676	.....	865	644	1,374	1,4
Indianapolis, Ind.	240	1,264	865	.....	453	1,809	1,4
Kansas City, Mo.	645	839	644	453	.....	1,356	1,4
Los Angeles, Calif.	1,983	701	1,374	1,809	1,356	.....	1,4
Louisville, Ky.	316	1,254	803	107	480	1,829	1,4
Memphis, Tenn.	623	976	484	384	369	1,603	1,4
Miami, Fla.	1,152	1,643	968	1,024	1,241	2,339	1,4
Minneapolis, Minn.	543	1,157	1,056	511	413	1,524	1,4
New Orleans, La.	939	983	318	712	680	1,673	1,4
New York, N. Y.	482	1,905	1,420	646	1,097	2,451	1,4
Omaha, Nebr.	669	878	794	525	166	1,315	1,4
Philadelphia, Pa.	443	1,836	1,341	585	1,038	2,394	1,4
Phoenix, Ariz.	1,690	346	1,017	1,499	1,049	357	1,4
Pittsburgh, Pa.	205	1,590	1,137	330	781	2,136	1,4
St. Louis, Mo.	455	1,034	679	231	238	1,589	1,4
Salt Lake City, Utah	1,492	689	1,200	1,356	925	579	1,4
San Francisco, Calif.	2,091	995	1,645	1,949	1,506	347	1,4
Seattle, Wash.	1,938	1,376	1,891	1,872	1,506	959	1,4
Washington, D. C.	396	1,728	1,220	494	945	2,300	1,4

Air Distances Between U. S. Cities

Source: U. S. Coast and Geodetic Survey.

Cities	Memphis	Miami	Minneapolis	New Orleans	New York	Omaha	Philadelphia
Birmingham, Ala.	217	665	862	312	864	732	783
Boston, Mass.	1,137	1,255	1,123	1,359	188	1,282	271
Buffalo, N. Y.	803	1,181	731	1,086	292	883	279
Chicago, Ill.	482	1,188	355	833	713	432	666
Cleveland, Ohio	630	1,087	630	924	405	739	360
Dallas, Tex.	420	1,111	862	443	1,374	586	1,299
Denver, Colo.	879	1,726	700	1,082	1,631	488	1,579
Detroit, Mich.	623	1,152	543	939	482	669	443
El Paso, Tex.	976	1,643	1,157	983	1,905	878	1,836
Houston, Tex.	484	968	1,056	318	1,420	794	1,341
Indianapolis, Ind.	384	1,024	511	712	646	525	585
Kansas City, Mo.	369	1,241	413	680	1,097	166	1,038
Los Angeles, Calif.	1,603	2,339	1,524	1,673	2,451	1,315	2,394
Louisville, Ky.	320	919	605	623	652	580	582
Memphis, Tenn. ....	....	872	699	358	957	529	881
Miami, Fla.	872	....	1,511	669	1,092	1,397	1,019
Minneapolis, Minn.	699	1,511	....	1,051	1,018	290	985
New Orleans, La.	358	669	1,051	....	1,171	847	1,089
New York, N. Y.	957	1,092	1,018	1,171	....	1,144	83
Omaha, Nebr.	529	1,397	290	847	1,144	....	1,094
Philadelphia, Pa.	881	1,019	985	1,089	83	1,094	....
Phoenix, Ariz.	1,263	1,982	1,280	1,316	2,145	1,036	2,083
Pittsburgh, Pa.	660	1,010	743	919	317	836	259
St. Louis, Mo.	240	1,061	466	598	875	354	811
Salt Lake City, Utah	1,250	2,089	987	1,434	1,972	833	1,925
San Francisco, Calif.	1,802	2,594	1,584	1,926	2,571	1,429	2,523
Seattle, Wash.	1,867	2,734	1,395	2,101	2,408	1,369	2,380
Washington, D. C.	765	923	934	966	205	1,014	123

Cities	Phoenix	Pittsburgh	St. Louis	Salt Lake City	San Francisco	Seattle	Washington
Birmingham, Ala.	1,456	608	400	1,466	2,013	2,082	661
Boston, Mass.	2,300	483	1,038	2,099	2,699	2,493	393
Buffalo, N. Y.	1,906	178	662	1,699	2,300	2,117	292
Chicago, Ill.	1,453	410	262	1,260	1,858	1,737	597
Cleveland, Ohio	1,749	115	492	1,568	2,166	2,026	306
Dallas, Tex.	887	1,070	547	999	1,483	1,681	1,185
Denver, Colo.	586	1,320	796	371	949	1,021	1,494
Detroit, Mich.	1,690	205	455	1,492	2,091	1,938	396
El Paso, Tex.	346	1,590	1,034	689	995	1,376	1,728
Houston, Tex.	1,017	1,137	679	1,200	1,645	1,891	1,220
Indianapolis, Ind.	1,499	330	231	1,356	1,949	1,872	494
Kansas City, Mo.	1,049	781	238	925	1,506	1,506	945
Los Angeles, Calif.	357	2,136	1,589	579	347	959	2,300
Louisville, Ky.	1,508	344	242	1,402	1,986	1,943	476
Memphis, Tenn.	1,263	660	240	1,250	1,802	1,867	765
Miami, Fla.	1,982	1,010	1,061	2,089	2,594	2,734	923
Minneapolis, Minn.	1,280	743	466	987	1,584	1,395	934
New Orleans, La.	1,316	919	598	1,434	1,926	2,101	966
New York, N. Y.	2,145	317	875	1,972	2,571	2,408	205
Omaha, Nebr.	1,036	836	354	833	1,429	1,369	1,014
Philadelphia, Pa.	2,083	259	811	1,925	2,523	2,380	123
Phoenix, Ariz. ....	....	1,828	1,272	504	653	1,114	1,983
Pittsburgh, Pa.	1,828	....	559	1,668	2,264	2,138	192
St. Louis, Mo.	1,272	559	....	1,162	1,744	1,724	712
Salt Lake City, Utah	504	1,668	1,162	....	600	701	1,848
San Francisco, Calif.	653	2,264	1,744	600	....	678	2,442
Seattle, Wash.	1,114	2,138	1,724	701	678	....	2,329
Washington, D. C.	1,983	192	712	1,848	2,442	2,329	....

Air Distances Between World Cities

Source: Encyclopaedia Britannica.

Cities	Berlin	Buenos Aires	Cairo	Calcutta	Capetown	Caracas	Chicago
Berlin, Germany		7,402	1,795	4,368	5,981	5,247	4,000
Buenos Aires, Argentina	7,402		7,345	10,265	4,269	3,168	5,981
Cairo, Egypt	1,795	7,345		3,539	4,500	6,338	6,129
Calcutta, India	4,368	10,265	3,539		6,024	9,605	6,024
Capetown, South Africa	5,981	4,269	4,500	6,024		6,365	6,365
Caracas, Venezuela	5,247	3,168	6,338	9,605	6,365		2,501
Chicago, Ill., U. S.	4,000	5,981	6,129	7,980	8,494	2,501	
Hong Kong (Victoria)	5,440	11,472	5,061	1,648	7,375	10,167	7,309
Honolulu, Hawaii, U. S.	7,309	7,561	8,838	7,047	11,534	6,013	
Istanbul, Turkey	1,078	7,611	768	3,638	5,154	6,048	5,981
Lisbon, Portugal	1,436	5,956	2,363	5,638	5,325	4,041	5,981
London, England	579	6,916	2,181	4,947	6,012	4,660	5,981
Los Angeles, Calif., U. S.	5,724	6,170	7,520	8,090	9,992	3,632	1,745
Manila, Philippines	6,132	11,051	5,704	2,203	7,486	10,620	8,090
Mexico City, Mexico	6,047	4,592	7,688	9,492	8,517	2,232	1,745
Montreal, Canada	3,729	5,615	5,414	7,607	7,931	2,449	3,729
Moscow, U.S.S.R.	1,004	8,376	1,803	3,321	6,300	6,173	4,000
New York, N. Y., U. S.	3,965	5,297	5,602	7,918	7,764	2,132	3,965
Paris, France	545	6,870	1,995	4,883	5,807	4,736	4,000
Rio de Janeiro, Brazil	6,220	1,200	6,146	9,377	3,773	2,810	5,981
Rome, Italy	784	6,929	1,320	4,482	5,249	5,196	4,000
San Francisco, Calif., U. S.	5,661	6,467	7,364	7,814	10,247	3,904	5,981
Shanghai, China	5,218	12,201	5,183	2,117	8,061	9,501	5,981
Stockholm, Sweden	504	7,808	2,111	4,195	6,444	5,420	5,981
Sydney, Australia	10,006	7,330	8,952	5,685	6,843	9,513	5,981
Tokyo, Japan	5,540	11,408	5,935	3,194	9,156	8,799	5,981
Warsaw, Poland	320	7,662	1,630	4,048	5,958	5,517	5,981
Washington, D. C., U. S.	4,169	5,218	5,800	8,084	7,901	2,059	5,981

Cities	Hong Kong	Honolulu	Istanbul	Lisbon	London	Los Angeles	Manila
Berlin, Germany	5,440	7,309	1,078	1,436	579	5,724	6,132
Buenos Aires, Argentina	11,472	7,561	7,611	5,956	6,916	6,170	11,051
Cairo, Egypt	5,061	8,838	768	2,363	2,181	7,520	5,704
Calcutta, India	1,648	7,047	3,638	5,638	4,947	8,090	2,203
Capetown, South Africa	7,375	11,534	5,154	5,325	6,012	9,992	6,024
Caracas, Venezuela	10,167	6,013	6,048	4,041	4,660	3,632	9,605
Chicago, Ill., U. S.	7,793	4,250	5,477	3,990	3,950	1,745	8,494
Hong Kong (Victoria)		5,549	4,984	6,853	5,982	7,195	7,309
Honolulu, Hawaii, U. S.	5,549		8,109	7,820	7,228	2,574	7,561
Istanbul, Turkey	4,984	8,109		2,012	1,552	6,783	7,611
Lisbon, Portugal	6,853	7,820	2,012		985	5,621	5,638
London, England	5,982	7,228	1,552	985		5,382	6,012
Los Angeles, Calif., U. S.	7,195	2,574	6,783	5,621	5,382		3,632
Manila, Philippines	693	5,299	5,664	7,546	6,672	7,261	
Mexico City, Mexico	8,782	3,779	7,110	5,390	5,550	1,546	8,517
Montreal, Canada	7,729	4,910	4,789	3,246	3,282	2,427	7,931
Moscow, U.S.S.R.	4,439	7,037	1,091	2,427	1,555	6,003	3,321
New York, N. Y., U. S.	8,054	4,964	4,975	3,364	3,458	2,451	7,918
Paris, France	5,985	7,438	1,400	904	213	5,588	4,883
Rio de Janeiro, Brazil	11,021	8,285	6,389	4,796	5,766	6,331	9,377
Rome, Italy	5,768	8,022	843	1,161	887	6,732	4,482
San Francisco, Calif., U. S.	6,897	2,393	6,703	5,666	5,357	347	7,814
Shanghai, China	764	4,941	4,962	6,654	5,715	6,438	2,117
Stockholm, Sweden	5,113	6,862	1,348	1,856	890	5,454	4,195
Sydney, Australia	4,584	5,073	9,294	11,302	10,564	7,530	5,685
Tokyo, Japan	1,794	3,853	5,560	6,915	5,940	5,433	3,194
Warsaw, Poland	5,144	7,355	863	1,715	899	5,922	4,048
Washington, D. C., U. S.	8,147	4,519	5,215	3,562	3,663	2,300	8,084

Air Distances Between World Cities

Source: *Encyclopaedia Britannica*.

Cities	Mexico City	Montreal	Moscow	New York	Paris	Rio de Janeiro	Rome
Germany	6,047	3,729	1,004	3,965	545	6,220	734
Buenos Aires, Argentina	4,592	5,615	8,376	5,297	6,870	1,200	6,929
Egypt	7,688	5,414	1,803	5,602	1,995	6,146	1,320
Calcutta, India	9,492	7,607	3,321	7,918	4,883	9,377	4,482
Cape Town, South Africa	8,517	7,931	6,300	7,764	5,807	3,773	5,249
Caracas, Venezuela	2,232	2,449	6,173	2,132	4,736	2,810	5,196
Chicago, Ill., U. S.	1,691	744	4,974	713	4,134	5,296	4,808
Hong Kong (Victoria)	8,782	7,729	4,439	8,054	5,985	11,021	5,768
Honolulu, Hawaii, U. S.	3,779	4,910	7,037	4,964	7,438	8,285	8,022
Istanbul, Turkey	7,110	4,789	1,091	4,975	1,400	6,389	843
Lisbon, Portugal	5,390	3,246	2,427	3,364	904	4,796	1,161
London, England	5,550	3,282	1,555	3,458	213	5,766	887
Los Angeles, Calif., U. S.	1,546	2,427	6,003	2,451	5,588	6,331	6,732
Manila, Philippines	8,835	8,186	5,131	8,498	6,677	11,259	6,457
Mexico City, Mexico	.....	2,318	6,663	2,094	5,716	4,771	6,366
Ottawa, Canada	2,318	.....	4,386	320	3,422	5,097	4,080
Novosibirsk, U.S.S.R.	6,663	4,386	.....	4,665	1,544	7,175	1,474
New York, N. Y., U. S.	2,094	320	4,665	.....	3,624	4,817	4,281
Paris, France	5,716	3,422	1,544	3,624	.....	5,699	697
Rio de Janeiro, Brazil	4,771	5,097	7,175	4,817	5,699	.....	5,684
Rome, Italy	6,366	4,080	1,474	4,281	697	5,684	.....
San Francisco, Calif., U. S.	1,887	2,539	5,871	2,571	5,558	6,621	6,240
Shanghai, China	8,022	7,053	4,235	7,371	5,754	11,336	5,677
Stockholm, Sweden	5,959	3,667	762	3,924	958	6,651	1,234
Sydney, Australia	8,052	9,954	9,012	9,933	10,544	8,306	10,136
Tokyo, Japan	7,021	6,383	4,647	6,740	6,034	11,533	6,135
Warsaw, Poland	6,365	4,009	715	4,344	849	6,467	817
Washington, D. C., U. S.	1,887	488	4,858	205	3,829	4,796	4,434

Cities	San Francisco	Shanghai	Stockholm	Sydney	Tokyo	Warsaw	Washington
Germany	5,661	5,218	504	10,006	5,540	320	4,169
Buenos Aires, Argentina	6,467	12,201	7,808	7,330	11,408	7,662	5,218
Egypt	7,364	5,183	2,111	8,952	5,935	1,630	5,800
Calcutta, India	7,814	2,117	4,195	5,685	3,194	4,048	8,084
Cape Town, South Africa	10,247	8,061	6,444	6,843	9,156	5,958	7,901
Caracas, Venezuela	3,904	9,501	5,420	5,513	8,799	5,517	2,059
Chicago, Ill., U. S.	1,858	7,061	4,278	9,272	6,299	4,667	597
Hong Kong (Victoria)	6,897	764	5,113	4,584	1,794	5,144	8,147
Honolulu, Hawaii, U. S.	2,393	4,941	6,862	5,073	3,853	7,355	4,519
Istanbul, Turkey	6,703	4,962	1,348	9,294	5,560	863	5,215
Lisbon, Portugal	5,666	6,654	1,856	11,302	6,915	1,715	3,562
London, England	5,357	5,715	890	10,564	5,940	899	3,663
Los Angeles, Calif., U. S.	347	6,438	5,454	7,530	5,433	5,922	2,300
Manila, Philippines	6,967	1,150	5,797	3,944	1,866	5,837	8,562
Mexico City, Mexico	1,887	8,022	5,959	8,052	7,021	6,365	1,887
Ottawa, Canada	2,539	7,053	3,667	9,954	6,383	4,009	488
Novosibirsk, U.S.S.R.	5,871	4,235	762	9,012	4,647	715	4,858
New York, N. Y., U. S.	2,571	7,371	3,924	9,933	6,740	4,344	205
Paris, France	5,558	5,754	958	10,544	6,034	849	3,829
Rio de Janeiro, Brazil	6,621	11,336	6,651	8,306	11,533	6,467	4,796
Rome, Italy	6,240	5,677	1,234	10,136	6,135	817	4,434
San Francisco, Calif., U. S.	.....	6,140	5,361	7,416	5,135	5,841	2,442
Shanghai, China	6,140	.....	4,825	4,899	1,097	4,951	7,448
Stockholm, Sweden	5,361	4,825	.....	9,696	5,051	501	4,123
Sydney, Australia	7,416	4,899	9,696	.....	4,866	9,696	9,758
Tokyo, Japan	5,135	1,097	5,051	4,866	.....	5,249	6,772
Warsaw, Poland	5,841	4,951	501	9,696	5,249	.....	4,457
Washington, D. C., U. S.	2,442	7,448	4,123	9,758	6,772	4,457	.....

Motor Vehicle Laws as of 1960

Source: American Automobile Association.

State	Date new license plates can be used	Driving license Required	Minimum age	State gasoline tax	% state sales tax	Period of stay for visitors ²	Safety responsibility law	Cer of rec
Alabama.....	Oct. 1	yes	16	\$.07	1½	Reciprocal	yes	
Alaska.....	Jan. 1	yes	16	.05	...	90 days	yes	
Arizona.....	Dec. 15	yes	18	.05	3	6 mos. ³	yes	
Arkansas.....	Jan. 1	yes	14	.065	3	90 days ⁴	yes	
California.....	Dec. 1	yes	16	.06	3	(⁵)	yes	
Colorado.....	Dec. 31	yes	16	.06	2	Reciprocal	yes	
Connecticut.....	Mar. 1	yes	16	.06	3 ⁶	(?)	yes	
Delaware.....	(⁶)	yes	16	.05	...	90 days	yes	
D. C.....	Mar. 1	yes	16	.06	2 ⁹	Reciprocal	yes	
Florida.....	Jan. 1	yes	16	.07	1	Reciprocal	yes	
Georgia.....	Jan. 1	yes	16	.065	3	30 days	yes	
Hawaii.....	Jan. 2	yes	15	.085	...	90 days	yes	
Idaho.....	Dec. 1	yes	16	.06	...	Reciprocal	yes	
Illinois.....	Dec. 1	yes	16	.05	3	Reciprocal	yes	
Indiana.....	Jan. 2	yes	16 ¹⁰	.06	...	60 days	yes	
Iowa.....	Dec. 1	yes	16	.06	2	Reciprocal	yes	
Kansas.....	Jan. 1	yes	16	.05	2½	(¹¹)	yes	
Kentucky.....	Dec. 29	yes	16	.07	3	Reciprocal	yes	
Louisiana.....	Dec. 1	yes	15	.07	2	Reciprocal	yes	
Maine.....	Dec. 25	yes	17	.07	3	Reciprocal	yes	
Maryland.....	Mar. 1	yes	16	.06	3	Reciprocal	yes ¹²	
Massachusetts.....	Jan. 1	yes	16	.055	(⁹)	Reciprocal	yes ¹³	
Michigan.....	Nov. 1	yes	16	.06	3	90 days	yes	
Minnesota.....	Nov. 15	yes	15	.05	...	Reciprocal	yes	
Mississippi.....	Nov. 1	yes	17	.07	2	30 days	yes	
Missouri.....	On issue	yes	16	.03	2	Reciprocal	yes	
Montana.....	On issue	yes	15	.06	...	60 days ^{16,17}	yes	
Nebraska.....	Jan. 1	yes	16	.07	...	Reciprocal	yes	
Nevada.....	June 1	yes	16	.06	2	(⁹)	yes	
New Hampshire.....	Mar. 1	yes	16	.07	...	Reciprocal	yes	
New Jersey.....	On issue	yes	17	.05	...	Reciprocal	yes ¹²	
New Mexico.....	Dec. 15	yes	18	.06	1 ⁹	(¹⁸)	yes	
New York.....	Jan. 1	yes	18	.06	...	Reciprocal	yes ^{12,13}	
North Carolina.....	Jan. 1	yes	16	.07	1 ¹⁹	Reciprocal	yes ¹⁸	
North Dakota.....	Nov. 1	yes	16	.06	2	Reciprocal	yes ¹²	
Ohio.....	Mar. 1	yes	16	.07	3	Reciprocal	yes	
Oklahoma.....	Dec. 11	yes	16	.065	2 ⁹	60 days ²⁰	yes	
Oregon.....	On issue	yes	16	.06	...	(⁹)	yes	
Pennsylvania.....	Mar. 15	yes	16	.05	4	Reciprocal	yes	
Rhode Island.....	Mar. 1	yes	16	.06	3	Reciprocal	yes	
South Carolina.....	Oct. 1	yes	16	.07	3	90 days	yes ¹²	
South Dakota.....	Jan. 1	yes	16	.06	2 ²¹	60 days	yes	
Tennessee.....	Mar. 1	yes	16	.07	3	30 days	yes	
Texas.....	Feb. 1	yes	16	.05	1.5	Reciprocal	yes	
Utah.....	Dec. 15	yes	16	.06	2	Reciprocal	yes	
Vermont.....	Feb. 1	yes	18	.065	...	Reciprocal	yes	
Virginia.....	Mar. 15	yes	15	.06	...	60 days	yes ¹²	
Washington.....	Jan. 2	yes	16	.065	4	Reciprocal	yes	
West Virginia.....	June 1	yes	16	.07	2	90 days	yes	
Wisconsin.....	On issue	yes	16	.06	...	Reciprocal	yes	
Wyoming.....	Dec. 1	yes	15	.05	2	90 days	yes	

¹ Speed limits are not given because they vary widely within each state depending on the kind of road, condition of the road, weather, light, local ordinances and so forth. In many states no maximum speed is specified; requirement being only what is reasonable and proper. ² Applies to nonresidents. The term "reciprocal" that the state will extend to a non-resident the identical privileges granted by his home state to nonresident. In some states, visitors must register within a specified time. In most states, persons who intend to reside permanently must buy new plates and secure new driving license at once, or within a limited time. Acquisition of license or placing children in public school is often considered intention to reside permanently. ³ Visitor required after 10 days. ⁴ Visitor's permit must be obtained after 30 days. ⁵ Until home state license plate expires or use tax on first registration of new or used cars. ⁶ Not to exceed 6 months when employed in state, months before current registration expires. ⁷ Excise tax. ⁸ 16 years and 1 month. ⁹ Until home-state registration expires or next Jan. 1, whichever is earlier. ¹⁰ State has "Unsatisfied Judgment Fund" law. ¹¹ State has no insurance. ¹² At discretion of Secretary of State. ¹³ Required for initial registration or vehicles previously registered in other states. ¹⁴ Visitors must register immediately. ¹⁵ Extension granted. ¹⁶ Nonresident car must be registered plates of place of residence of owner. ¹⁷ \$80 maximum. ¹⁸ Visitor's permit must be obtained days. ¹⁹ Registry tax on first registration in state. ²⁰ Bill of sale must be filed. ²¹ Minimum age for Driver Course graduates is 15.

The National Park System of the United States

Source: National Park Service.

The National Park System of the United States, administered by the National Park Service, a bureau of the Department of the Interior, embraces a total of 180 areas, covering approximately 22,918,073 acres in Federal ownership. Started with the establishment of Yellowstone National Park in 1872, the system includes not only the most ordinary and spectacular scenic exhibits in the United States but also a large number of areas distinguished for their historic or prehistoric importance or scientific interest. The number and extent of the various types of areas which comprise the system, as of January 1, 1960, are as follows:

Type of area	Number	Federal land (acres)	Lands within exterior boundaries not federally owned (acres)	Total lands within exterior boundaries (acres)
National Parks	29	13,205,071.01	250,307.45	13,455,378.46
National Historical Parks	7	31,841.66	5,359.87	37,201.53
National Monuments	83	8,984,449.45	145,087.79	9,129,537.24
National Military Parks	12	26,324.71	2,383.57	28,708.28
National Memorial Park	1	68,708.36	1,665.94	70,374.30
National Battlefield Parks	3	5,318.07	2,170.03	7,488.10
National Battlefield Sites	5	188.63	547.35	735.98
National Historic Sites	12	1,491.40	2.12	1,493.52
National Memorials	13	4,447.96	152.00	4,599.96
National Cemeteries	10	215.10	5.00	220.10
National Seashore Recreational Area	1	24,705.23	3,794.77	28,500.00
National Parkways	3	91,429.72	21,458.44	112,888.16
National Capital Parks	1	39,503.53	1,444.00	40,947.53
National Park System	180	22,483,694.83	434,378.33	22,918,073.16

Includes Catoctin Mountain Park, Chesapeake and Ohio Canal, Prince William Forest Park, Baltimore-Washington Parkway, Saultland Parkway among the 780 units administered by National Capital Parks.

National Parks

Name, location and year established as National Park	Area in U. S. ownership, acres	Outstanding characteristics
Acadia (Maine), 1919	30,847.27	Rugged seashore on Mt. Desert Island and adjacent mainland
Bandelier (Texas), 1944	700,220.70	Mountains and desert bordering the Rio Grande
Bryce Canyon (Utah), 1928	36,010.38	Area of grotesque eroded rocks brilliantly colored
Cave of the Winds (N. Mex.), 1930	45,846.59	One of the world's largest known caves; spectacular flight of bats
Crater Lake (Oregon), 1902	160,290.33	Deep blue lake in crater of inactive volcano
Death Valley (California), 1933	1,301,327.00	Subtropical area with abundant bird and animal life
Glacier (Montana), 1910	1,009,109.90	Rocky Mountain scenery with many glaciers and lakes
Grand Canyon (Arizona), 1909	673,203.35	Mile deep gorge, 4 to 18 miles wide, 217 miles long (105 in park)
Grand Teton (Wyoming), 1929	302,096.74	Picturesque range of high mountain peaks
Great Smoky Mts. (N. C.-Tenn.), 1930	509,147.52	Highest mountain range east of Black Hills; luxuriant plant life
Hawaii (Hawaii), 1916	196,040.61	Spectacular volcanic area; luxuriant vegetation at lower levels
Hot Springs (Arkansas), 1921	985.83	47 mineral hot springs said to have therapeutic value
Isle Royale (Michigan), 1940	539,338.51	Largest wilderness island in Lake Superior; great moose herd
Joshua Tree (California), 1940	453,768.38	Huge canyons; high mountains; giant sequoias
Mount Lassen (California), 1916	105,106.25	Exhibits of impressive volcanic phenomena
Mammoth Cave (Kentucky), 1936	50,695.73	Vast limestone labyrinth with underground river
Mesa Verde (Colorado), 1906	51,017.87	Best preserved prehistoric cliff dwellings in United States
McKinley (Alaska), 1917	1,939,354.04	Highest mountain in North America; spectacular wildlife
Mount Rainier (Washington), 1899	241,571.09	Single-peak glacial system; dense forests, flowered meadows
Mount St. Helens (Washington), 1938	888,557.79	Finest mountain wilderness of Pacific Northwest
Mount Rushmore (South Dakota), 1906	911.97	Cold mineral springs with distinctive properties
Rocky Mountain (Colorado), 1915	256,100.49	Section of the Rocky Mountains; 65 named peaks over 10,000 feet
Sequoia (California), 1890	385,418.92	Giant sequoias; magnificent High Sierra scenery, including Mt. Whitney
Shenandoah (Virginia), 1935	193,177.75	Tree-covered mountains; scenic Skyline Drive
United States Virgin Islands (U. S. V. Islands), 1956	5,173.58	Beaches; lush hills; prehistoric Carib Indian relics
Wind Cave (South Dakota), 1903	28,052.66	Limestone caverns in Black Hills, buffalo herd
Yellowstone (Wyoming-Montana), 1872	2,213,206.55	World's greatest geyser area; spectacular falls and canyon; one of world's great wildlife sanctuaries
Yosemite (California), 1890	758,041.01	Mountains; inspiring gorges and waterfalls; giant sequoias
Zion (Utah), 1909	130,452.20	Multicolored gorge in heart of southern Utah desert

National Historical Parks

Name and location	Acreage in U. S. ownership
Appomattox Court House (Va.)	946.35
Chalmette (Louisiana)	69.61
Colonial (Virginia)	7,263.19
Cumberland Gap (Ky.-Tenn.-Va.)	20,184.20
Independence (Pennsylvania)	15.20
Morristown (New Jersey)	957.96
Saratoga (New York)	2,405.15

National Monuments

Ackia Battleground (Miss.)	49.15
Andrew Johnson (Tennessee)	16.33
Arches (Utah)	34,249.94
Aztec Ruins (New Mexico)	27.14
Badlands (South Dakota)	99,906.94
Bandelier (New Mexico)	27,048.89
Big Hole Battlefield (Montana)	200.00
Black Canyon of the Gunnison (Colorado)	13,175.48
Booker T. Washington (Va.)	199.73
Cabrillo (California)	80.50
Canyon de Chelly (Arizona)	83,840.00
Capitol Reef (Utah)	36,115.65
Capulin Mountain (N. Mex.)	680.42
Casa Grande (Arizona)	472.50
Castillo de San Marcos (Fla.)	18.51
Castle Clinton (New York)	1.00
Cedar Breaks (Utah)	6,172.20
Chaco Canyon (New Mexico)	20,989.35
Channel Islands (California)	18,166.68
Chiricahua (Arizona)	10,480.90
Colorado (Colorado)	17,606.76
Craters of the Moon (Idaho)	48,003.86
Custer Battlefield (Montana)	765.34
Death Valley (Calif.-Nev.)	1,879,048.24
Devils Postpile (California)	798.46
Devils Tower (Wyoming)	1,266.91
Dinosaur (Utah-Colorado)	190,962.13
Edison Laboratory (New Jersey)	1.51
Effigy Mounds (Iowa)	1,204.36
El Morro (New Mexico)	880.80
Fort Frederica (Georgia)	94.40
Fort Jefferson (Florida)	47,125.00
Fort Laramie (Wyoming)	214.41
Fort Matanzas (Florida)	227.76
Fort McHenry (Maryland)	43.26
Fort Pulaski (Georgia)	5,361.62
Fort Sumter (South Carolina)	2.40
Fort Union (New Mexico)	720.60
Fort Vancouver (Wash.)	74.71
George Washington Birthplace (Virginia)	393.68
George Washington Carver (Missouri)	210.00
Gila Cliff Dwellings (N. Mex.)	160.00
Glacier Bay (Alaska)	2,274,248.44
Gran Quivira (New Mexico)	610.94
Grand Canyon (Arizona)	193,040.00
Great Sand Dunes (Colorado)	34,979.88
Harpers Ferry (W. Va.-Md.)	469.23
Homestead (Nebraska)	162.73
Hovenweep (Utah-Colorado)	505.43
Jewel Cave (South Dakota)	1,274.56
Joshua Tree (California)	505,171.82

Name and location	Acreage in U. S. ownership
Katmai (Alaska)	2,697,591.00
Lava Beds (California)	46,231.00
Lehman Caves (Nevada)	641.00
Meriwether Lewis (Tennessee)	301.00
Montezuma Castle (Arizona)	787.00
Mound City Group (Ohio)	6.00
Muir Woods (California)	481.00
Natural Bridges (Utah)	2,611.00
Navajo (Arizona)	31,174.00
Ocmulgee (Georgia)	685.00
Oregon Caves (Oregon)	411.00
Organ Pipe Cactus (Arizona)	328,691.00
Perry's Victory (Ohio)	1.00
Petrified Forest (Arizona)	90,222.00
Pinnacles (California)	12,972.00
Pipe Spring (Arizona)	27.00
Pipestone (Minnesota)	19.00
Rainbow Bridge (Utah)	60,981.00
Saguaro (Arizona)	2,119.00
Scotts Bluff (Nebraska)	1.00
Sitka (Alaska)	1.00
Statue of Liberty (New York)	3,000.00
Sunset Crater (Arizona)	211.00
Timpanogos Cave (Utah)	1,111.00
Tonto (Arizona)	1.00
Tumacacori (Arizona)	1.00
Tuzigoot (Arizona)	1.00
Walnut Canyon (Arizona)	140,200.00
White Sands (New Mexico)	34,800.00
Whitman (Washington)	1.00
Wupatki (Arizona)	1.00
Yucca House (Colorado)	1.00

National Military Parks

Chickamauga and Chattanooga (Georgia-Tennessee)	8,111.00
Fort Donelson (Tennessee)	1.00
Fredericksburg and Spotsylvania (Virginia)	2,411.00
Gettysburg (Pennsylvania)	2,711.00
Gullford Courthouse (N. C.)	1.00
Horseshoe Bend (Alabama)	2,011.00
Kings Mountain (S. C.)	3,811.00
Moores Creek (North Carolina)	1.00
Petersburg (Virginia)	1,011.00
Shiloh (Tennessee)	3,511.00
Stones River (Tennessee)	3.00
Vicksburg (Mississippi)	1,311.00

National Memorial Park

Theodore Roosevelt (N. Dak.)	68.71
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National Battlefield Parks

Kennesaw Mountain (Georgia)	2,811.00
Manassas (Virginia)	1,711.00
Richmond (Virginia)	6.00

National Battlefield Sites

Antietam (Maryland)	1.00
Brices Cross Roads (Mississippi)	1.00
Cowpens (South Carolina)	1.00
Fort Necessity (Pennsylvania)	1.00
Tupelo (Mississippi)	1.00

National Historic Sites

Name and location	Acreage in U. S. ownership	Name and location	Acreage in U. S. ownership
Abraham Lincoln Birthplace (Kentucky)	116.50	Washington Monument (D. C.)	.37
Acadia (Maine)	4.77	Wright Brothers (N. C.)	324.03
Adams National Historical Park (Massachusetts)	13.54		
Adams National Historical Park (North Carolina)	18.50		
Adams National Historical Park (Maryland)	45.42		
Adams National Historical Park (New York)	93.69		
Adams National Historical Park (Pennsylvania)	848.06		
Adams National Historical Park (Missouri)	82.58		
Adams National Historical Park (Massachusetts)	8.08		
Adams National Historical Park (Massachusetts)	8.61		
Adams National Historical Park (Puerto Rico)	40.00		
Adams National Historical Park (New York)	211.65		

National Memorials

Adams National Historical Park (Arizona)	2,745.33
Adams National Historical Park (Virginia)	3.47
Adams National Historical Park (Florida)	24.18
Adams National Historical Park (N. Y.) .....	.45
Adams National Historical Park (Florida)	119.51
Adams National Historical Park (New York) .....	.76
Adams National Historical Park (Where Lincoln Died) .....	.05
Adams National Historical Park (D. C.) .....	.61
Adams National Historical Park (D. C.) .....	.18
Adams National Historical Park (S. Dak.)	1,227.82
Adams National Historical Park (D. C.)	1.20

National Cemeteries¹

Antietam (Maryland)	11.36
Battleground (D. C.)	1.03
Fort Donelson (Tennessee)	15.34
Fredericksburg (Virginia)	12.00
Gettysburg (Pennsylvania)	15.55
Poplar Grove (Virginia)	8.72
Shiloh (Tennessee)	10.25
Stones River (Tennessee)	20.09
Vicksburg (Mississippi)	117.85
Yorktown (Virginia)	2.91

National Seashore Recreational Area

Cape Hatteras (North Carolina)	24,705.23
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National Parkways

Blue Ridge (N. C.-Va.)	60,998.10
George Washington Memorial (Va.-Md.)	3,985.93
Natchez Trace (Tenn.-Ala.-Miss.)	26,445.69

National Capital Parks

National Capital Parks (D. C.-Va.-Md.-W. Va.)	39,503.53
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¹ For Arlington National Cemetery, see index. It is not included here because it is under the jurisdiction of the Department of the Army rather than of the National Park Service.

Museums of the United States

Source: Questionnaires to Museums.

NEW YORK CITY

American Academy of Arts and Letters: W. 155th St., New York 32. Open: Sun. & Sun. during exhib. 2-5 (closed Mon.). Otherwise by appt. Free.

Painting, sculpture by members of Academy and Natl. Inst. of Arts & Letters (by appt.). Fall exhibition of paintings available for purchase on Hassam Fund. Winter exhibition on special theme. Spring exhibition by new members and recipients of grants and honors.

American Museum of Natural History: Central Park W. at 79th St., New York 24. wkdys. 10-5, Sun. & hldys. 1-5. Free. Branches of natural sciences with exhibits including astronomy at American Museum-Hayden Planetarium.

Brooklyn Museum: Eastern Pkwy., Brooklyn, N. Y. Open: wkdys. 10-5, Sun. & hldys. 1-5 (closed Xmas). Free.

American painting, Colonial to modern. 20th-century European painting. Modern sculpture. Egyptian and primitive art. Ancient art and art of Near and East. Period rooms. Gallery shop with handicrafts of many countries.

Metropolitan Museum of Art: Ft. Tryon Pk., New York 40. wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5 (May-Sept., Sun., 1-6). Free.

Cloisters, chapel, chapter house reconstructed from parts of medieval structures. Frescoes, polychromed statues, stained glass, Gothic tapestries. Branch of Metropolitan Museum of Art.

Frick Collection: 1 E. 70th St., New York 21. Open: wkdys. 10-5 (closed Mon. & mo. of Aug.), Sun. & hldys. 1-5. Free.

Paintings, prints, drawings of 14th to 19th centuries. Italian Renaissance and French sculpture and furniture. Chinese and French porcelain. Concerts, lectures. Guggenheim (Solomon R.) Museum, Guggenheim Foundation: 5th Ave. at 88th St., New York 28. Open: wkdys. 10-6 (closed Mon.), Sun. 12-6. Adm. 50¢.

Works of leading 20th century foreign and American painters and sculptors.

Hispanic Society of America (Museum & Library): Broadway between W. 155th & 156th Sts., New York 32. Museum open: wkdys. 10-4:30, Sun. 2-5 (closed Mon., July 4, Thanks. Day, Xmas). Library open: wkdys. 1-4:30 (closed Sun., Mon., hldys., mo. of Aug.). Free.

Paintings, sculpture, decorative arts, manuscripts and incunabula, representative of Hispanic culture. Works on Hispanic art, history, and published literature of which much is devoted to objects in the collection.

Jewish Museum: 5th Ave. at 92nd St., New York 28. Open: Mon.-Thurs. 1-5 (closed Fri., Sat.), Sun. 11-6. Free.

Jewish ceremonial and historical objects. Works of art, past and contemporary. Junior gallery, child's map of Israel.

Metropolitan Museum of Art: 5th Ave. at 82nd St., New York 28. Open: wkdys. 10-5 (closed Mon.), Sun., hldys. 1-5. Free. Comprehensive collection of European and American paintings, sculpture, decorative arts, prints. Egyptian, Asiatic, Classical art. Musical instruments, arms and armor. European and American period rooms. Costumes and textiles. See also Cloisters.

Museum of Modern Art: 11 W. 53rd St., New York 19. Open: wkdys. 11-6, Sun. 1-7. Adm. 95c (children 25c).

Founded 1929 to aid study of modern art and its application to manufacturing and practical life. Constantly changing exhibitions of contemporary painting, sculpture, prints, photography, architecture, industrial design, films.

Museum of the American Indian, Heye Foundation: Broadway at 155th St., New York 32. Open: Tues.-Sun. 1-5 (closed Mon., hldys., mos. of July & Aug.). Free.

Archaeology and ethnology of Americas from Arctic Circle to Tierra del Fuego. **Museum of the City of New York:** 5th Ave. at 104th St., New York 29. Open: wkdys. 10-5 (closed Mon.), Sun., hldys. 1-5, closed Xmas. Free.

History and life of New York City. Period costumes, furniture, miniature scenes, portraits, paintings, prints, manuscripts, theater and music collection, silver, horse car, dolls and doll houses.

National Academy of Design: 1083 5th Ave. (at 90th St.) New York 28. Open: wkdys. & Sun. 1-5 (during exhibitions).

Special annual exhibitions by selected organizations Oct. thru May.

New York Historical Society: Central Park W. at 77th St., New York 24. Museum open: wkdys. & Sun. 1-5, (Sat. 10-5, closed Mon.). Library open: Mon.-Sat., 10-5. (Closed NY Day, July 4, Thnks. Day, Xmas, month of Aug.). Free.

New York city and state historical exhibits. Early American paintings and portraits. Period rooms. Audubon watercolors. John Rogers statuettes. Large American history library.

Roosevelt (Theodore) Museum: 28 E. 20th St., New York 3. Open: wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5 (closed NY Day, Good Fri., Easter, Thnks. Day, Xmas). Free.

Restored birthplace of Roosevelt. Mounted lion shot by him in Africa. Photographs, letters, trophies, personal items. **Whitney Museum of American Art:** 22 W. 54th St., New York 19. Open: wkdys. & Sun. 1-5 (closed major holidays). Free.

Sculpture, paintings, watercolors, draw-

ings by 20th-century American artists. Exhibitions of contemporary and historical American art.

CHICAGO

Art Institute of Chicago: Michigan Av. Adams St., Chicago 3, Ill. Open: wkdys. 9-5, Sun. 12-5. Adm. 25c. (free Wed., Sun., hldys.).

Paintings, sculpture, prints, drawings. Oriental arts; European, American decorative arts; primitive art. Thorne Moore Rooms.

Chicago Academy of Sciences, Museum of Natural History: Lincoln Park—2001 Clark St., Chicago 14, Ill. Open: 10-5. Free.

Emphasis on regional natural history. Exhibits of animal and plant life, minerals and fossils of Chicago region. Astronomical exhibits. Junior Academy of Science.

Chicago Historical Society: N. Clark St. North Ave., Chicago 14, Ill. Open: wkdys. 9:30-4:30, Sun. 12:30-5:30. Free (Adm. 25c). Mem. Day, July 4, Lab. Day 25c for adults. Exhibits and period rooms from discovery of America to present. Special emphasis on history of Chicago. Washington and Lincoln exhibits.

Chicago Natural History Museum (formerly Field Museum): Roosevelt Rd. at Lake Shore Dr., Chicago 5, Ill. Open: wkdys. Sun.—Nov.-Feb. 9-4; May-Aug. 9-6; Apr., Sept., Oct. 9-5 (closed Xmas and Day). Adm. 25c. (free Thurs., Sat., Sun.).

Exhibits in anthropology, botany, zoology. Prehistoric skeletons. Dioramas of Stone-Age Europe.

Egyptian collection. Model of moon.

Museum of Science and Industry: 57th St. at Lake Michigan, Chicago 37, Ill. Open: fall & winter—wkdys. 9:30-4, Sun. hldys. 10:30-6; spring & summer—even- 9:30-6. Free (small fee to certain exhibits).

"Do it yourself" museum where learning is fun. Operating coal mine, real marine, giant heart, Paul Bunyan. Original "Atoms for Peace" Exhibit. science exhibits from Brussels World Fair.

Oriental Institute Museum of the University of Chicago: 1155 E. 58th St., Chicago 37, Ill. Open: Tues. & Weds. 10-12 Thurs.-Sun. 10-5 (closed Mon.). Free.

Ancient Near Eastern objects, including 40-ton human-headed winged bull. Khorsabad in Assyria, 16-ft. statue of Tutankhamen from Egypt, colossal head from Persepolis, statuary, gold and ivory ornaments.

Vanderpoel (John H.) Memorial Art Gallery: Longwood Dr. at 96th St., Chicago 37, Ill. Open: wkdys. & Sun. 9-5 (closed hldys.). Free.

Paintings, watercolors, etchings, sculpture contributed by the artists in tribute to Mr. Vanderpoel.

WASHINGTON, D. C.

Freer Gallery of Art: 17th St. at New Ave., N. W., Washington 6, D. C. wkdys. 10-4:30 (closed Mon.; Sat.), Sun. & hldys. 2-5 (closed Xmas, May & July 4). Free.

Specializes in American art, but has no collection of 17th century Dutch or 19th century French paintings. Ferrugs, Italian majolica, Greek and Roman antiquities. Barye bronzes. American sculpture. Annual and special exhibitions of U. S. art.

Gallery of Art, Smithsonian Institution: Jefferson Dr. at 12th St., S.W., Washington 25, D. C. Open: daily 9-4:30 (closed Xmas). Free.

Paintings, sculpture, bronzes, jewelry, metalwork, manuscripts. Large extant Whistler collection.

National Air Museum, Smithsonian Institution: The Mall, 10th and Jefferson Dr., Washington 25, D. C. Open: daily 9-4:30 (closed Xmas). Free.

Sizeable aircraft exhibited, including Wright brothers' *Kitty Hawk Flyer*, Lindbergh's *Spirit of St. Louis*, Wiley Post's *Gwen Mae*, Bell *Supersonic X-1*.

National Collection of Fine Arts, Smithsonian Institution: Constitution Ave. at 10th Washington 25, D. C. Open: daily 9-4:30 (closed Xmas). Free.

Art collections given by Harriet Lane Johnston, Ralph Cross Johnson, William H. Vans, John Gellatly and others. Room dedicated to Albert Pinkham Ryder.

National Gallery of Art, Smithsonian Institution: Constitution Ave. at 6th St., Washington 25, D. C. Open: wkdys. 10-5, Sun. & hldys. 10-5 (closed Xmas & N Y Day). Free.

Paintings, sculpture, drawings, prints, decorative arts given by Mellon, Kress, F. B. Rosenwald, Dale, the Booths, the Garbisches and others. Index of American Design.

National Institution: on the Mall, Washington 25, D. C. Open: daily 9-4:30 (closed Xmas). Free.

Contains the following museums and galleries: Freer Gallery of Art, National Air Museum, National Collection of Fine Arts, National Gallery of Art, National Museum. See those entries.

States National Museum, Smithsonian Institution: on the Mall, Washington 25, D. C. Open: daily 9-4:30 (closed Xmas). Free.

Points in anthropology, zoology, botany, geology, paleontology, engineering, astronomy, technology, crafts, numismatics, philately, history, etc.

PHILADELPHIA

Museum of Natural Sciences of Philadelphia: 19th and the Parkway, Philadelphia 19, Pa. Open: wkdys. 10-5 (summer 10-4), Sun. & hldys. 10-5. Adm. 50¢ (children 25¢).

Habitat groups of animals of North

America, Africa, Asia. Hall of Earth History, Audubon Bird Hall. Minerals, gems. Aquarium. Live animal demonstrations.

Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanical Arts: 20th St. at Benj. Franklin Pkwy., Philadelphia 3, Pa. Open: wkdys. 12-5 (Sat. 10-5, closed Mon.), Sun. 12-5. Arm. 75¢.

Activities grouped into 7 major categories: Benj. Franklin Memorial; monthly Journal; lectures; library; medal awards; museum of science and industry, including planetarium; research laboratories.

Pennsylvania Academy of the Fine Arts: Broad and Cherry Sts., Philadelphia 2, Pa. Open: wkdys. 10-5 (closed Mon., Good Fri., Mem. Day, July 4, Thanks Day, Xmas, NY Day), Sun. & hldys. 1-5. Free.

Permanent collections include American art from 18th century to present. Special exhibitions.

Philadelphia Museum of Art: Parkway at 26th St., Philadelphia 30, Pa. Open: wkdys. & Sun. 9-5 (closed all legal hldys.). Free. Paintings: old masters, contemporary French, American, Mexican. Prints, decorative arts, period rooms. Oriental arts. Operates Colonial Chain of Houses in Fairmount Park, Rodin Museum and Samuel S. Fleischer Art Memorial.

MUSEUMS IN OTHER CITIES

(Free unless otherwise noted)

Alabama Museum of Natural History: University of Alabama, Tuscaloosa. Open: wkdys. & Sun. 8-5.

All phases of natural history with emphasis on geology.

Atomic Energy, American Museum of: Oak Ridge, Tenn. Open: wkdys. 9:30-5; Sun. 12:30-6:30. Free.

Demonstrations, exhibits, motion pictures, models, etc. relating to atomic energy. Traveling exhibits available free to qualified exhibitors in U. S.*

Baseball Hall of Fame and Museum, Natl.: Main St., Cooperstown, N. Y.

Relics, pictures, documents of baseball history. Bronze plaques of game's immortals. See also Hall of Fame in index.

Berkshire Museum: Pittsfield, Mass. Open: wkdys. 10-5 (closed Mon.), Sun. 2-5.

Painting, sculpture, decorative arts, loan exhibitions—ancient to modern; galleries of birds, animals, biology. Peary arctic sledge. Original "One Hoss Shay." First Wm. Stanley transformer. Little Cinema theater.

(Boston) Museum of Fine Arts: 465-479 Huntington Ave., Boston 15, Mass. Open: wkdys. 10-5 (Tues., Oct.-May, 10-10; closed Mon. & hldys.), Sun. 1:30-5:30.

European and American paintings. Early American silver, furniture, interiors. Print collection largest in U. S. Noted Asiatic, Egyptian, Classical collections.

* Send inquiries to Museum Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tenn.

Buffalo Fine Arts Academy—Albright Art Gallery: 1285 Elmwood Ave., Buffalo 22, N. Y. Open: Sun. & Mon. 2-6, rest of wk. 10-5 (closed Thns. Day, Xmas, NY Day).

Comprehensive collection of contemporary painting. English 18th- and French 19th-century works. Sculpture 3000 B.C. to present.

Buffalo Museum of Science: Humboldt Park, Buffalo, N. Y. Open: wkdys. 10-5 (Sat. 9-5), Sun. & hldys. 1:30-5:30.

Extensive natural history collections. African and South Sea exhibits. Chinese pottery. Babylonian seals. Living museum.

California Academy of Sciences: Golden Gate Park, San Francisco 18. Open: wkdys. & Sun. 10-5.

North American and African habitat groups. Astronomical exhibits, clocks, watches, lamps, minerals, plants. Steinhart Aquarium. Morrison Planetarium. Continuous research program.

California Palace of the Legion of Honor: Lincoln Park, San Francisco. Open: daily 10-5 (hldys. 1-5).

European and American paintings. Rodin sculpture and drawings. Furniture, tapestries, bronzes, porcelain. Egyptian art. Print and lithograph collection.

Carnegie Institute: 4400 Forbes Ave., Pittsburgh 13, Pa. Open: wkdys. 10-5 (Tues. during winter mos. 10-10), Sun. 2-5.

Department of Fine Arts: European and American paintings, ancient sculpture. Museum: exhibits in history and natural history. Music Hall. Carnegie Library.

Cincinnati Art Museum: Eden Park, Cincinnati 6, Ohio. Open: wkdys. 10-5 (Tues. Oct.-Apr., 10-10), Sun. & hldys. 2-5 (closed Thns. Day & Xmas).

Paintings, prints, decorative arts, period rooms, Near & Far Eastern potteries and bronzes. Egyptian, Greco-Roman, Medieval, Oriental sculptures. Ancient musical instruments.

Cleveland Museum of Art: Wade Park, Cleveland 6, Ohio. Open: Tues. & Thrs. 10-6, Wed. 10 A.M.-10 P.M., Fri. during lecture season 10-10 (closed Mon., July 4, Thns. Day, Xmas), Sat. 9-5, Sun. 1-6.

Classical and modern art of all nations and ages. Paintings, sculpture, graphic arts, furniture, silver, prints, arms and armor, textiles, Byzantine, Medieval, Early American collections.

Cleveland Museum of Natural History: 10600 East Blvd., Cleveland 6, Ohio. Open: wkdys. 9-5 (closed Mon.), Sun. 1-5:30.

Natural history exhibits from formation of our solar system to present—animals, plant life, geology. Mueller Planetarium, Hall of Nature.

Colonial Williamsburg: Williamsburg, Va. Open: daily. Adm. \$3 for block ticket; students and servicemen \$1.50. Children under 7 free; 7-11, 50¢.

Restoration of 18th-century capital Virginia colony: 500 reconstructed restored buildings, 83 ac. of garden, three 18th-century restaurants.

Colorado Springs Fine Arts Center: 3 Dale St., Colorado Springs, Colo. Open: wkdys. 9-5 (closed Mon. from Sept. 1 to May), Sun. 1:30-5.

Contemporary paintings. Collection of Spanish-American New Mexican & Southwest Indian arts and crafts.

Corning Glass Center: Corning, N. Y. Open: wkdys. & Sun. 9:30-5 (closed Mon.). Museum has most comprehensive collection of glass in world; Hall of Science and Industry shows many uses of glass. Factory has comfortable gallery where visitors may watch glass being made.

Currier Gallery of Art: 192 Orange St., Manchester, N. H. Open: wkdys. 10-5, Sun. 2-5.

European and American paintings, 17th-20th century. American decorative arts of 18th century, including fine New England furniture, silver and early American. Temporary exhibitions. Concerts and lectures.

Davenport Public Museum: Brady St. & 7th, Davenport, Iowa. Open: wkdys. 10-5 (closed Mon.), Sun., hldys. 2-5.

Science, history, applied art exhibits including anthropology, ethnology, prehistoric and Mediterranean cultures.

Denver Art Museum: 5 separate branches. Administration offices: Schleier Gallery, 1343 Acoma St., Denver 4, Colo. Open: wkdys. 9-5 (closed Mon.), Sun. 2-5.

Ancient Mediterranean, European, American paintings and decorative arts. Egyptian, South Sea, African, Latin American, American Indian arts and crafts.

Denver Museum of Natural History: Park, Denver 6. Open: wkdys. 9-4:30, Sun. & hldys. 12-5. Winter: wkdys. 10-5, Sun. & hldys. 12-4:30.

Natural history of North and South America, Australia and South Pacific. Ecological exhibits of mammals, birds. Minerals, fossil mammal and bird skeletons, New World archaeology.

Detroit Historical Museum: 5401 Woodward, Detroit 2. Open: wkdys. 1-10 (closed Mon.), Sun. 1-10.

Industrial, social history, maritime, military exhibits. Streets of Detroit 1840-50, 1870-80. Large model railroad.

Detroit Institute of Arts: 5200 Woodward Ave., Detroit, Mich. Open: Sept.-June, wkdys. 1-10 (Sat. 9-6, closed Mon.), July & Aug.—wkdys. & Sun. 1-10 (closed Mon.); closed all hldys.

Survey of history as expressed in paintings, sculpture, furniture, tapestry, gold work, ivory, graphic arts, textiles, armor. Murals by Diego Rivera. Moving pictures.

Farmers' Museum: Lake Rd., Rouses Point, N. Y.

stown, N. Y. Open: May 1–Nov. 1, daily. Re-created Village Crossroads, Apr. 30, 9–5 daily exc. Mon. & Sun. Adm. \$1.25 May 1–Nov. 1 (children

y farm and handicraft tools. School se, country store, smithy, print shop, or's and lawyer's offices, pharmacy, rn, farm unit. Cardiff Giant. Oper- by N. Y. State Historical Assn.

ore House: Lake Rd., Route 80, stown, N. Y. Open: May 1–June 30 n 9–6; July 4–Labor Day—daily 9–9; Oct. 31—daily 9–6; Nov. 1–Apr. 30 y 9–5. Adm. 75¢ (children 25¢).

ican portraits, genre paintings. ere life masks of Founding Fathers. lilton-Burr Room. James Fenimore er memorabilia. Folk art. Library. ated by N. Y. State Historical Assn. a State Museum: Gainesville, Fla. wkdys. 9:30–5, Sun. & hldys. 1–5. aeology, ethnology, ornithology and r phases of natural history. Also his- and industry.

er (Isabella Stewart) Museum: 280 nway, Boston 15, Mass. Open: Tues., Sat. 10–4, Sun. 2–5, first Thurs. of mo., 10 A.M.–10 P.M. (closed other natl. hldys., and during Aug.). l tours on closed days, including hrough Fri. in Aug., 11 A.M. and

issance art in building of Venetian e style. Painting, sculpture, tapes- furniture.

Museum: 22 E. Monte Vista Rd., x, Ariz. Open (Oct. 1–June 1): 10–5 (closed Mon.), Sun. 1–5.

istoric and historic pottery, blan- beadwork, carvings, weapons, etc., various parts of world.

(John) Art Museum: 110 E. 16th dianapolis, Ind. Open: wkdys. 9–5 Mon. & hldys.), Sun. 1–6.

ean paintings from Renaissance to nt. American paintings of 19th and centuries. Egyptian, Greek, Asiatic ture and ceramics, Chinese bronzes, ics, jades.

gton (Henry E.) Library and Art : San Marino 9, Calif. Open: wkdys. 1–4:30 (closed Mon. and during

century British paintings. Library its of English and American history iterature. Gutenberg Bible. Frank- autobiography in his handwriting. alical garden. Research facilities.

State Museum: Springfield, Ill. wkdys. 8:30–5, Sun. 2–5.

ral history and art. Anthropologi- rchaeological, botanical, geological, ical collections.

tional Folk Art, Museum of (Unit Museum of N. Mex.): Off Old Pecos nta Fe, N. Mex. Open: Mon.–Sat. 5, Sun. 2–4 (1–5 summer).

Collection of folk art from 50 countries. The Layton Collection: Memorial Center, Milwaukee, Wis. Open: wkdys. 10–5, Sun. 1–5.

Exhibitions of selections from permanent collections.

Los Angeles County Museum: Exposition Park, Los Angeles 7, Calif. Open: wkdys. & Sun. 10–5 (closed Mon., Thns. Day, Xmas).

American, European, Eastern art. Ameri- can Indian exhibits. Habitat groups of African and North American animals. California History Hall. La Brea fossils.

Mint Museum of Art: 501 Hempstead Pl., Charlotte, N. C. Open: wkdys. 10–5 (closed Mon.), Sun. 3–5.

American and European paintings and prints. Relics of former U. S. branch mint.

Mound State Monument Archaeological Museum: Moundville, Ala. Open: wkdys & Sun. 8–5 (closed Xmas). Adm. 50¢ adults, 25¢ children.

Uncovered Indian burials, etc., of Moundville Indians. Operated by Ala- bama Museum of Natural History.

Mystic Seaport (Marine Historical Association, Inc.): Mystic, Conn. Open: wkdys. & Sun. 9–5 (closed Thns. Day, Xmas.). Adm. \$2.00 (children 50¢).

Reconstructed seaport of Age of Sail. Typical waterfront street. *Charles W. Morgan*, last of wooden whaleships. Plan- etarium.

Navajo Ceremonial Art, Museum of: Ca- mino Lejo, near old Pecos Rd., Santa Fe, N. Mex. Open: wkdys. 9–12, 1–4:30 (closed Mon.), Sun. 2–5. Adm. 50¢ adults; 25¢ chil- dren 6–12; Indians, free.

Sand paintings, ceremonial objects, bas- kets, blankets, silver. Music records of chants. Comparative material from Asia and elsewhere. Library.

Nelson (William Rockhill) Gallery of Art and Atkins Museum of Fine Arts: 4525 Oak, Kansas City 11, Mo. Open: Tues.–Sat. 10–5, Sun. 2–6 (closed Mon., NY Day, July 4, Thns. Day, Xmas). Adm. 25¢ (children 10¢) (free Sat. & Sun.).

European paintings from 13th century to present. Paintings and sculpture from Kress Collection. Extensive Chinese collection. Egyptian, Greek, Roman collec- tions. English pottery. Concerts, movies.

New York State Historical Association: Lake Rd., Route 80, Cooperstown, N. Y. Administers Farmers' Museum and Fen- more House. See those entries.

Newark Museum: 43–49 Washington St., Newark 1, N. J. Open: Oct.–June—wkdys. 12–5:30 (Wed. & Thur. 12–5:30, 7–9:30), Sun. & hldys. 2–6; July–Sept.—wkdys. 12–5, Sun. & hldys. 2–6.

Collections: American painting, sculp- ture; Tibetan, Chinese, Japanese arts;

decorative arts, ancient glass & ceramics; natural science, ethnology, mechanical models. Planetarium. Junior museum.

Ringling (John & Mable) museums: Sarasota, Fla. Museum of Art, Asolo Theater, John Ringling Residence, Museum of the Circus open wkdys. 9-4:30, Sun. 12:30-4:30. Closed Xmas and Thnks. Day. Adm.: Art Museum, \$1; Residence, \$1; Circus Museum, 50¢; general admission, \$2.

Collection of old masters, especially Rubens. Only 18th-century Italian theater in America. Elaborate furnishings in Residence. Illustrative and historical material in Circus Museum.

Rosierucian Egyptian, Oriental Museum and Art Gallery: San Jose, Calif. Open: wkdys. 9-12 & 1-5 (Sat. 1-5), Sun. 12-5.

Egyptian and Oriental antiquities. Mummies, statuary, jewelry, utensils, clothing. Reproductions of Egyptian rock tomb and temple. Art gallery.

(St. Louis) City Art Museum: Forest Park, St. Louis 5, Mo. Open: wkdys. & Sun. 10-5 (Tues. 2:30-9:30, closed Mon.).

Collection covers all fields of fine art: painting, sculpture, graphic art, decorative art, period rooms. Public restaurant.

San Diego, Fine Arts Gallery of: Plaza de Panama, Balboa Park, San Diego, Calif. Open: wkdys. 10-5, Sun. 1-5:30 (closed Mon. & mo. of Sept.).

European, American paintings, 14th century to present, with emphasis on Spanish, Italian, Flemish and Dutch art. Asiatic arts and prints.

San Diego Museum of Man: California Quadrangle, Balboa Park, San Diego, Calif. Open: wkdys. 10-4:45, Sun. 12-4:45.

Exhibits on Egypt; primitive weapons; Choco, North American, San Diego County Indians; Mayan archaeology; Mexican ethnology.

San Diego Society of Natural History—Natural History Museum: San Diego, Calif. Open: wkdys. & Sun. 10-4:30 (closed Xmas, NY Day).

Mammals, birds, fossils, shells, plants, insects, minerals. Emphasis on Southwestern U. S., Sonora and Lower California.

San Francisco Museum of Art: War Memorial Bldg., San Francisco, Calif. Open: Tues.-Fri. 12-10, Sat., Sun., Mon. 1-6.

Contemporary European, American paint-

ings, sculpture, drawings, prints, architecture, photographs, decorative including work by San Francisco artists. 40-50 exhibitions annually.

Southwest Museum, Inc.: Marmion W. Museum Dr., Highland Pk., Los Angeles, Calif. Open: wkdys. & Sun. 1-5 (closed Mon., & certain hldys.).

American Indian exhibits, ancient modern. Library. Casa de Adobe, reproduction of adobe hacienda, located at 6405 N. Figueroa St.; open Wed., Sat., Sun. 2-5 P.M.

Toledo Museum of Art: Monroe at E. Wood, Toledo 1, Ohio. Open: wkdys. (Mon. 1-5), Sun. hldys. 1-5 (closed 2 NY Day).

Dutch, French, English, American paintings. Old Masters. Prints, manuscripts, sculpture. Ancient, modern glass. Catalog, Egyptian art. Library, coins. Founded by Edward Drummond Libb. **Virginia Museum of Fine Arts:** Boulevard at Grove Ave., Richmond 20. Open: wkdys. 2-6, 8-10 (closed Mon.), Sun. 2-6. Sat., Sun. (other days 30¢).

European, American, Oriental art; French and American paintings. European treasures; imperial Russian jewels. Musical theater with annual season of 5.

Wadsworth Atheneum: 25 Atheneum N., Hartford 3, Conn. Open: wkdys. (Sat. 9-5, closed Mon., Gd. Fri., Labor Day, Thnks. Day, Xmas, NY Day, Sun. 1:30-5:30).

European and American paintings, drawings from 1400 to present. Br. porcelain, silver. American period furniture. Library, concerts, music.

Walters Art Gallery: Charles and C. Sts., Baltimore 1, Md. Open: wkdys. (July-Aug. 11-4), Sun. & hldys. 2-5 (closed NY Day, July 4, Thnks. Day, Xmas, NY Day).

Art from ancient empires to 19th-century Europe. Important collections of Islamic art and medieval illuminated manuscripts.

Worcester Art Museum: 55 Salisbury Worcester 8, Mass. Open: wkdys. (Tues. in Nov.-Apr. 10-10), Sun. hldys. 2-5 (closed July 4, Thnks. Day, Xmas).

Art from Egyptian to modern times including Far East. Emphasis on painting and sculpture. Classes, lectures, color films. Professional art school.

Portraits and Designs of U. S. Paper Currency

Currency	Portrait	Design on back
\$1	Washington	ONE between obverse and reverse of Great Seal of U. S.
\$2	Jefferson	Monticello.
\$5	Lincoln	Lincoln Memorial.
\$10	Hamilton	U. S. Treasury Building.
\$20	Jackson	White House.
\$50	Grant	U. S. Capitol.

Currency	Portrait	Design on back
\$100	Franklin	Independence Hall.
\$500	McKinley	Ornate FIVE HUNDRED
\$1,000	Cleveland	Ornate ONE THOUSAN
\$5,000	Madison	Ornate FIVE THOUSAN
\$10,000	Chase	Ornate TEN THOUSAN
\$100,000*	Wilson	100,000 superimposed lar sign.

* For use only in transactions between Federal Reserve System and Treasury Department.

RELIGION



Principal Religions of the World

Sources: *Encyclopaedia Britannica* and various religious organizations.

figures of the world's religions are only very rough approximations. Aside from Christianity, few religions attempt to keep statistical records; and even Protestants and Catholics employ different methods of counting members. All persons of whatever age who have received baptism in the Catholic Church are counted as members, while in most Protestant Churches only those who "join" the church are numbered. The compiling of figures is further complicated by the fact that in China one may be at the same time a Confucian, a Taoist and a Buddhist. In Japan, one may be both a Buddhist and a Shintoist.

Religion	North America	South America	Europe	Asia	Africa	Australasia ¹	Total
Christian.....	179,061,381	128,135,223	464,971,814	52,250,694	34,124,351	11,380,357	869,923,820
Catholic.....	103,940,000 ²	125,559,000	238,952,000 ³	34,949,000	21,461,000	2,782,000	527,643,000
Orthodox.....	2,908,420	.....	112,447,669	8,106,071	5,868,089	.....	129,330,249
Protestant.....	72,212,961	2,576,223	113,572,145	9,195,623	6,795,262	8,598,357	212,950,571
Muslim.....	5,521,700	655,030	3,452,350	1,915,000	560,750	64,500	12,169,330
Hindu.....	35,000	350,000	12,675,500	327,988,000	87,912,000	104,000	429,064,500
Buddhist.....	.....	.....	.....	140,000	.....	.....	140,000
Jewish.....	.....	.....	.....	50,000,000	.....	.....	50,000,000
Sikh.....	15,000	17,000	12,000	50,000,000	1,200	8,000	50,053,200
.....	86,000	95,000	50,000	300,000,000	7,500	52,000	300,290,500
.....	165,000	135,000	10,000	150,000,000	.....	.....	150,310,000
.....	27,300	303,000	.....	328,107,400	630,240	111,100	329,179,040
.....	50,000	1,000,000	.....	45,000,000	75,000,000	100,000	121,150,000
.....	68,819,619	1,944,747	84,375,336	286,462,906	35,538,959	3,630,043	480,771,610
.....	253,781,000	132,635,000	565,547,000	1,591,864,000	233,775,000	15,450,000	2,793,052,000

¹Includes Australia, New Zealand and Oceania. ²Includes Catholics in Central America and the West Indies. ³Includes Communist-controlled Eurasia. ⁴Includes total Jewish population whether or not related to the synagogue.

History of Leading Religious Groups in the United States

(50,000 members or over.)

Source: *Yearbook of American Churches*.

Baptist

American Baptist Association.—A group of independent Missionary Baptist churches organized into an association in 1801. Members (1959): 647,800.

American Baptist Convention.—The early local independence of Baptist churches in America tended to impede formation of any general organization. In 1814 a General Missionary Convention was formed to permit Baptists to express themselves in terms of missionary activities. In 1845, the state convention of the South withdrew to organize the Southern Baptist Convention. In 1907, the Southern Baptist Convention was organized, a delegated body under whose authority the many agencies of the Baptists in the North and West now operate. In 1950, the name was changed to the Southern Baptist Convention. Members (1959): 1,555,360.

First General Conference of America.—Now known as the Swedish Baptist Conference of America. It has functioned as a general conference since 1826. Members (1959): 68,930.

General Baptist Association of America.—Organized in 1947, it is a body

with no authority over the local churches. Adherents consider the Bible infallible. Members (1959): 275,000.

Free Will Baptists.—A body of Arminian Baptists, organized in 1787 by Benjamin Randall in New Hampshire. Members (1959): 200,000.

The General Association of Regular Baptist Churches.—Founded in 1932 in Chicago by a group of churches which had withdrawn from the Northern Baptist Convention. Members (1959): 130,612.

General Baptists.—An Arminian group of Baptists, organized in 1607 and transplanted to the Colonies in 1714. It died down in the East but was revived in the Midwest in 1823 under Rev. Benoni Stinson. Members (1959): 55,637.

National Baptist Convention, U. S. A., Inc.—The older and parent convention of Negro Baptists. This body is to be distinguished from the National Baptist Convention of America, usually referred to as the "unincorporated" body. Members (1958): 5,000,000.

National Baptist Convention of America.—This is a body usually referred to as the "unincorporated" convention, not to be confused with the "incorporated" National

Baptist Convention, U. S. A., Inc., from which this body withdrew. Organized in 1895. Members (1956): 2,668,799.

National Baptist Evangelical Life and Soul Saving Assembly of U. S. A.—Organized in 1921 by A. A. Banks, Sr., as a charitable, educational, and evangelical organization. Members (1951): 57,674.

National Primitive Baptist Convention of the U. S. A.—A group of Negro Baptists opposed to all forms of church organization. Members (1957): 80,983.

North American Baptist Association.—Organized 1950 in Little Rock, Ark., as the result of a division in the American Baptist Association. In theology these churches are militantly fundamentalist. Members (1959): 330,265.

Primitive Baptists.—A large group of Baptists, largely through the South, who are opposed to all centralization, to modern missionary societies, and to Sunday schools. They are sometimes called "anti-missionary" Baptists. Members (1950): 72,000.

Southern Baptist Convention.—In 1845, Southern Baptists withdrew from the General Missionary Convention over the question of slavery and other matters and formed the Southern Baptist Convention. Members (1959): 9,485,276.

United Baptists.—This group dates from meetings of Regular Baptists and Separate Baptists held in Richmond, Va., in 1787, and a meeting under the name United Baptists in Clark County, Ky., in 1801. Members (1955): 63,641.

The United Free Will Baptist Church.—A body which set up its organization in 1901. Though ecclesiastically distinct, they are in close relations with the Free Will Baptists. Members (1958): 100,000.

Catholic and Orthodox

Armenian Church of North America.—The American branch of the Ancient Church of Armenia. Established in the U. S. in 1889. Diocesan organization under the jurisdiction of the Holy See of Etchmiadzin, Armenia, U.S.S.R. Members (1959): 125,000.

The American Carpatho-Russian Orthodox Greek Catholic Church.—This church is a self-governing diocese in communion with the Ecumenical Patriarchate of Constantinople. On Sept. 19, 1938, the late Patriarch Benjamin I canonized the diocese in the name of the Orthodox Church of Christ. Members (1959): 100,000.

Greek Archdiocese of North and South America.—Greek-speaking Orthodox Christians have had parishes in the U. S. for the last seventy years. These were first under the jurisdiction of the Metropolitan of Athens and later under the Patriarchate of Constantinople. Political changes in Europe have been reflected in this country

and have brought difficulties in all branches of the Orthodox Church. In 1931, a general convention held in New York City under the presidency of Archbishop Athenagoras brought a large measure of unity and order. Members (1959): 1,200,000.

North American Catholic Church.—This body is identical with the Roman Catholic Church in worship, faith, etc., but differs in discipline. It was received into communion with the Eastern Orthodox Church by Archbishop of Beirut in 1911 and by the Orthodox Patriarch of Alexandria in 1913. Members (1959): 71,521.

Polish National Catholic Church of America.—After long dissatisfaction with the Roman Catholic Administration in many Polish parishes, this group was organized in 1904. Members (1958): 271,316.

The Roman Catholic Church.—The oldest single group of Christians in the United States. The Roman Catholic Church is under the spiritual leadership of Pope John XXIII. This group dates back to the priests who accompanied Columbus on his first voyage to the New World. A settlement, later discontinued, was made at St. Augustine, Fla. The continuous history of this Church in the colonies began with the Marys in 1634, in Maryland. Members (1959): 40,871,302.

Romanian Orthodox Episcopate of America.—This body of Eastern Orthodox Christians of Rumanian descent is under the spiritual supervision and canonical jurisdiction of the Bishop of the Romanian Orthodox Church of North and South America. Members (1959): 50,000.

The Russian Orthodox Church of America.—Organized in 1920 to unite missions and parishes of the Russian Orthodox Church outside of Russia. Members (1955): 55,000.

The Russian Orthodox Greek Catholic Church of America.—The Russian Orthodox Catholic Church entered America in 1792. In 1872, its headquarters were moved from Sitka to San Francisco and, in 1907, to New York. It administers churches in the U. S. (including Alaska and Aleutians), Canada, South America, and Japan. Members (1957): 755,000.

U. S. Church Membership, 1959

Source: Yearbook of American Churches, 1960

Religious group	Members
Buddhist.....	117,000
Old Catholic and Polish National Catholic.....	10,000
Eastern Orthodox.....	1,200,000
Jewish.....	4,000,000
Roman Catholic.....	40,871,302
Protestant.....	61,000,000
Total.....	117,000,000

NOTE: Compiled from figures furnished by religious bodies in the U. S.

Danish Eastern Orthodox Church.—This body of the Eastern Orthodox Church is its own diocese and is under jurisdiction of the Serbian Patriarchate (Yugoslavia). Members (1959): 250,000.

Antiochian Orthodox Church.—This body is a division of the Orthodox Church which is under the jurisdiction of the Patriarch of Antioch. It is a member of the Federation of Orthodox Greek Catholic Churches in America. Members (1959): 1,000.

Orthodox Church of U.S.A.—This church was organized in the U. S. in 1922. Members (1959): 84,500.

Lutheran

American Lutheran Church.—This church is a constituent body of the American Lutheran Conference. It is itself the result of the merger in 1930 of the Evangelical Lutheran Joint Synod of Ohio and Other States (org. 1918), the Evangelical Lutheran Synod of Iowa and Other States (org. 1854), and the Lutheran Synod of Wisconsin (org. 1845). Members (1959): 1,000,000.

Swedish American Lutheran Church.—This group, whose constituency originates as of Swedish extraction, is a member of the American Lutheran Conference and also a participating body in the American Lutheran Council. Organized in 1917. Members (1959): 596,147.

Evangelical Lutheran Church.—In 1917 the United Norwegian Church, the Norwegian Synod, and the Hauge Synod united to form the name of Norwegian Lutheran Church of America. In 1930 this group became a constituent part of the American Lutheran Conference. The new name, The Evangelical Lutheran Church, was adopted at the General Convention in 1946. Members (1959): 1,125,867.

Evangelical Lutheran Joint Synod of Wisconsin and Other States.—This group, a constituent part of the Synodical Conference, was organized in Wisconsin in 1850. Members (1957): 342,993.

American Lutheran Church—Missouri Synod.—This is the largest constituent part of the American Lutheran Conference, was organized in 1820. It holds to an unwavering confessionalism and is the leader in the conservative movement among the Lutherans. Members (1959): 2,304,962.

American Free Church.—This body was organized in 1897 as the result of differences of opinion in the United Norwegian Church over control of the Augsburg Seminary. It became a constituent part of the American Lutheran Conference in 1930. Members (1959): 82,595.

United Evangelical Lutheran Church.—This church was organized in 1896 in Minnesota by a merger of the two former

Danish Lutheran Synods in America: the Danish Ev. Luth. Church Conference (1884) and the Danish Ev. Luth. Church in North America (1893). Members (1959): 66,623.

United Lutheran Church in America.—This group dates back to the Ministerium of Pennsylvania, organized in 1748, and beyond that to early colonial days. It represents the union of the General Synod, General Council, and United Synod of the South in 1918. Members (1959): 2,369,263.

Methodist

African Methodist Episcopal Church.—This group was formed in Philadelphia in 1816 and extended throughout the South after the Civil War. Members (1951): 1,166,301.

African Methodist Episcopal Zion Church.—This group was organized in 1796, coming out of the John Street Methodist Church, New York. Members (1959): 780,000.

Christian Methodist Episcopal Church.—In 1870, the General Conference of the M.E. Church, South, approved the request of its colored membership for the formation of their conferences into a separate body. Members (1951): 392,167.

Free Methodist Church of North America.—This body, organized in 1860, grew out of a movement in the Genesee Conference of the Methodist Episcopal Church towards a more original Methodism. Members (1959): 55,568.

The Methodist Church.—In April, 1939, the Uniting Conference forming The Methodist Church was held by representatives of the Methodist Episcopal Church, the Methodist Episcopal Church, South, and the Methodist Protestant Church. The Methodist Church in the United States originated with the efforts of John and Charles Wesley, leaders of the revival movement in England in the eighteenth century. Methodist emigrants from Ireland planted Methodism in America about 1760. In 1771 Francis Asbury, one of Wesley's preachers, later a Bishop, landed in Philadelphia. The Methodist Episcopal Church was organized in 1784-85. The Methodist Episcopal Church, South, dated from 1846, the separation from the Methodist Episcopal Church having taken place over the slavery issue. The Methodist Protestant Church dated from 1830 and was organized over the issue of lay representation. Members (1959): 9,815,460.

Presbyterian

Cumberland Presbyterian Church.—In 1806, a presbytery (Cumberland) of the Presbyterian Church was dissolved by the Synod of Kentucky on account of its attitude toward revivalism. Members of the presbytery organized as an independent

body in 1810 and became the Cumberland Presbyterian Church. When this body attempted to reunite with the Presbyterian Church in 1906, a minority preferred to continue as an independent church. Members (1959): 87,263.

Presbyterian Church in the U. S.—This group is the branch of the Presbyterian Church which separated from the main body at the time of the Civil War. It is often called the "Southern" Presbyterian Church. Members (1959): 889,196.

The United Presbyterian Church in the U.S.A.—This group was formed in 1958 by a merger of the Presbyterian Church in the U.S.A. (dating from 1640) and the United Presbyterian Church of North America (established in 1858 by a merger of groups tracing their heritage to covenantant and seceder churches in Scotland). Members (1959): 3,145,733.

Other Religious Bodies

Apostolic Overcoming Holy Church of God.—A Negro body incorporated in Alabama in 1919. Members (1956): 75,000.

Assemblies of God.—Independent, pentecostal, evangelical, missionary churches associated for co-operative effort in district and general councils. Organized in Arkansas in 1914. Members (1959): 505,552.

Buddhist Churches of America.—Organized in 1914 as the Buddhist Mission of North America, this group was incorporated in 1942 under the present name and represents Buddhism in this country, the faith based on "the anatman doctrine, supplemented by the idea of karma, and nirvana, the holy ease or a blissful mental state of absolute freedom from evil." Members (1959): 20,000.

The Christian and Missionary Alliance.—An evangelical, evangelistic, and missionary movement organized in 1887. It stresses "the deeper Christian life and consecration to the Lord's service." Members (1959): 59,644.

Christian Churches (Disciples of Christ).—In the revival period of the early nineteenth century, a movement under Thomas Campbell and his son, Alexander, resulted in the establishment of a fellowship called Christians or Disciples. They believe that sects are unscriptural. Members (1959): 1,801,414.

Christian Reformed Church.—A group of Dutch Calvinists which dissented from the Reformed Church in America in 1857 and which was strengthened by later accessions from the same source and by immigration. Members (1959): 236,145.

Church of Christ, Scientist.—Founded by Mary Baker Eddy in 1879. As defined by Mrs. Eddy, Christian Science is the scientific system of divine healing and reinstatement of primitive Christianity.

The Church of God.—Inaugurated by Bishop A. J. Tomlinson, who served as General Overseer 1903-43. Episcopal administration. Members (1959): 74,209.

Church of God (Anderson, Ind.).—This group is one of the largest of the groups which have taken the name "Church of God." Its headquarters are at Anderson, Ind. It originated about 1880. Members (1959): 135,294.

Church of God (Cleveland, Tenn.).—This body, to be differentiated from the Church of God at Anderson, Ind., is a holiness group and pentecostal. It began in 1886 in Tennessee, under the name Christian Union, reorganized in 1902 as Holiness Church. In 1907 it adopted the name above. Members (1959): 162,794.

Church of God in Christ.—Organized in Arkansas in 1895, by C. P. Jones and Mason, who believed there was no salvation without holiness; incorporated 1897. Members (1959): 382,679.

Church of the Brethren (Conservative Duncers).—German pietists from Kassel, Germany, under the leadership of C. F. Becker, entered the colonies in 1719, settled at Germantown, Philadelphia. They were called Duncers (baptizers) because they were immersionists. The members are conservative as to attire, oaths or affirmations, resistance to force, temperance, etc. Members (1959): 201,219.

Church of the Nazarene.—One of the larger holiness bodies, organized in Point, Tex., Oct. 1908. It is in general accord with the early doctrines of Methodism and emphasizes entire sanctification. Members (1959): 300,771.

Churches of Christ.—This body is made up of a large group of churches, formerly reported with the Disciples of Christ, since the religious census of 1906, registered separately. They are strictly congregational and have no organization larger than the local congregation. Members (1959): 2,007,650.

Congregational Christian Churches.—Congregational churches date back to the Pilgrim Fathers and the early colonial New England in 1620. The Methodist churches date back to the Wesleyan revival movements at the end of the eighteenth century. These two groups of churches were merged at Seattle, Wash. 1931. Members (1959): 1,414,595.

*Membership figure not available. The manual church forbids "the numbering of people and the giving of such statistics for publication."

Evangelical and Reformed Church.—This body was formed on June 26, 1934, at Findlay, Ohio, by a union of the Evangelical Synod of North America and the Reformed Church in the United States. This union was unique in that it left all matters to be adjusted afterwards. The constitution was declared in effect at the General Synod which met at Lancaster, Pa., in 1940. Members (1959): 809,137.

Evangelical Covenant Church of America.—Transplantation to the U. S., in 1885, of the free-church movement in the Swedish Church. Until recently the name has been the Swedish Evangelical Mission Society. Members (1959): 59,396.

Evangelical United Brethren Church.—This group had its origin in Johnstown, Pa., November 16, 1946, in the consummation of an organic union between the Evangelical Church and the Church of the Brethren in Christ. Both these former communions had their beginning in Pennsylvania in the evangelistic movement of the early 19th century. Jacob Albright was the founder of the Evangelical Church, and Philip William Otterbein was the founder of the United Brethren Church in America. Members (1959): 749,788.

Friends, The Five Years Meeting of.—The Five Years Meeting of Friends was organized in 1902 by 13 Yearly Meetings entering into a loose confederation. Since 1902 two of the original Yearly Meetings have withdrawn (Kansas and Oregon) and there are Yearly Meetings outside the U. S. Members (1959): 68,399.

National Church of the Foursquare Gospel.—An evangelistic missionary body founded by Aimee Semple McPherson in 1906. The parent church is Angelus Temple in Los Angeles. Members (1959): 79,012.

Onesimus Witnesses.—A group calling themselves primitive Christians. They believe that the Kingdom under Christ will abolish all earthly governments. Members (1959): 239,418.

Orthodox Congregations.—Jews arrived in America before 1650. The first congregation is recorded in 1656, in New York City. The Shearith Israel (Remnant of Israel) was organized in 1656. Members (1959): 5,500,000.

Seven-day Saints, Church of Jesus Christ of Latter-day Saints.—A group in which the Bible, the Book of Mormon, the Doctrine and Covenants and the Pearl of Great Price are regarded as the word of God. The primitive organization is sought. Members (1959): 1,457,735.

Seven-day Saints, Reorganized Church of Jesus Christ of Latter-day Saints.—A division among the Latter-day Saints (Mormons) occurred on the death of Joseph Smith in 1844. His son, Joseph Smith III, became presiding officer of the group, which has headquarters at Independence, Mo. Members (1959): 152,408.

Mennonite Church.—The largest group of the Mennonites who began arriving in the U. S. in 1683, settling in Germantown, Pa. They derive their name from Menno Simons, born 1496. Members (1959): 72,138.

Moravian Church (Unitas Fratrum).—In 1735, Moravian missionaries of the pre-Reformation faith of John Huss came to Georgia and, in 1740, to Pennsylvania. They established the Moravian Church. Members (1959): 60,470.

Pentecostal Assemblies of the World, Inc.—A pentecostal holiness group originating in the early part of the century and found largely in the Midwest. Members (1958): 50,000.

Pentecostal Church of God of America, Inc.—Organized in 1919 at Chicago, Ill. Members (1958): 103,500.

The Protestant Episcopal Church.—This group entered the colonies with the earliest settlers as the Church of England. It became autonomous, adopted its present name in 1789. Members (1958): 3,126,662.

Reformed Church in America.—This group was established by the earliest Dutch settlers of New York as the Reformed Protestant Dutch Church in 1628. Members (1959): 219,770.

The Salvation Army.—An evangelistic organization, with a military government, first set up by General William Booth in England and introduced into the U. S. in 1880. Members (1959): 253,061.

Seventh-day Adventists.—This body developed out of the Adventist movement (1833-1844), which emphasized the imminent personal return of Jesus Christ. It emphasized the observance of the seventh-day Sabbath and in 1863 was numerous enough to organize a conference. Members (1959): 311,535.

Spiritualists, International General Assembly of.—Organized in Buffalo, N. Y., in 1936. Members (1956): 164,072.

Unitarian Churches.—The Unitarian movement in Congregationalism, beginning in the eighteenth century, produced the American Unitarian Association in 1825. In 1865 a national conference was organized. Members (1959): 109,508.

United Church of Christ.—A merger in 1957 of the Evangelical and Reformed Church and the Congregational Christian Churches. Pending the adoption of a constitution for the United Church of Christ the present structures and procedures of the two groups will continue in effect.

United Pentecostal Church, Inc.—Pentecostal Church, Inc., and Pentecostal Assemblies of Jesus Christ merged in 1945 at St. Louis. Members (1958): 160,000.

Universalist Church of America.—The philosophy of Universalism originated in the first century A.D. and was carried to America in the eighteenth century. Members (1958): 68,949.

Bishops of the Protestant Episcopal Church

[Source: Alexander M. Rodger, Secretary, The House of Bishops, 207 Fairmount Rd., Ridgewood, N. Y.]

(Note: M—Missionary Bishop; C—Coadjutor; S—Suffragan)

Presiding Bishop: Arthur C. Lichtenberger, New York City. Vice President of National Council: J. Bentley, 218 Park Ave. South, New York 10, N. Y.

- Alabama:** Chas. C. J. Carpenter, George M. Murray (C), Birmingham.
- Alaska:** Wm. J. Gordon, Jr. (M), Fairbanks.
- Albany (N. Y.):** Frederick L. Barry, Allen W. Brown (S).
- Arizona:** Arthur B. Kinsolving II, Phoenix.
- Arkansas:** Robert R. Brown, Little Rock.
- Atlanta (Ga.):** Randolph R. Claiborne.
- Bethlehem (Pa.):** Frederick J. Warnecke.
- California:** James A. Pike, George R. Mil-lard (S), San Francisco.
- Central America:** David E. Richards (M), San José, Costa Rica.
- Central Brazil:** Edmund K. Sherrill (M), Rio de Janeiro.
- Central New York:** Walter M. Higley, Syracuse.
- Chicago:** Gerald F. Burrill, Charles L. Street (S).
- Colorado:** Joseph S. Minnis, Denver.
- Connecticut:** Walter H. Gray, John H. Esquirol (S), Hartford.
- Cuba:** Alexander H. Blankingship (M), Havana.
- Dallas (Tex.):** C. Avery Mason, Joseph M. Harte (S).
- Delaware:** J. Brooke Mosley, Wilmington.
- Dominican Republic:** Paul A. Kellogg (M), Ciudad Trujillo.
- East Carolina:** Thomas H. Wright, Wil-mington, N. C.
- Eastern Oregon:** Lane W. Barton (M), Bend.
- Easton (Md.):** Allen J. Miller.
- Eau Claire (Wis.):** William W. Horstick.
- Erie (Pa.):** William Crittenden.
- European Churches:** Stephen F. Bayne, Jr., London, Eng.
- Florida:** Hamilton West, Jacksonville.
- Fond du Lac (Wis.):** William H. Brady.
- Georgia:** Albert R. Stuart, Savannah.
- Haiti:** C. A. Voegeli (M), Port-au-Prince.
- Harrisburg (Pa.):** J. Thomas Heistand, Harrisburg; Earl M. Honaman (S), Wil-liamsport.
- Honolulu:** Harry S. Kennedy (M).
- Idaho:** Norman L. Foote (M), Boise.
- Indianapolis:** John P. Craine.
- Iowa:** Gordon V. Smith, Des Moines.
- Kansas:** Edward C. Turner, Topeka.
- Kentucky:** C. Gresham Marmion, Jr., Louis-ville.
- Lexington (Ky.):** William R. Moody.
- Liberia:** Bravid W. Harris (M), Monrovia.
- Long Island:** James P. DeWolfe, Jonathan G. Sherman (S), Garden City, N. Y.
- Los Angeles:** Francis E. I. Bloy, Ivot I. Cur-tis (S).
- Louisiana:** Girault M. Jones, New Orleans; Iveson B. Noland (S), Alexandria.
- Maine:** Oliver L. Loring, Portland.
- Maryland:** Noble C. Powell, Harry L. (C), Baltimore.
- Massachusetts:** Anson Phelps Stokes, Boston, Frederic C. Lawrence (S).
- Mexico:** José G. Saucedo (M), Mexico.
- Michigan:** Richard S. Emrich, Arch-bishop; Crowley (S), Robert L. De Witt, Detroit.
- Milwaukee:** Donald H. V. Hallock.
- Minnesota:** Hamilton H. Kellogg, Phil-McNairy (S), Minneapolis.
- Mississippi:** Duncan M. Gray, Jackson.
- Missouri:** George L. Cadigan, St. Louis.
- Montana:** Chandler W. Sterling, Helena.
- National Council:** Daniel Corrigan, 1000 of Home Department, New York.
- Nebraska:** Howard R. Brinker, Omaha.
- Nevada:** William G. Wright (M), Reno.
- New Hampshire:** Charles F. Hall, Concord.
- New Jersey:** Alfred L. Banyard, Trenton.
- New Mexico and Southwest Texas:** C. J. Kinsolving III, Albuquerque, N. M.
- New York:** Horace W. B. Donegan, C. F. Boynton (S), J. Stuart Wetmore, New York City.
- Newark (N. J.):** Leland Stark, D. MacAdie (S).
- North Carolina:** Richard H. Baker, TH. A. Fraser, Jr. (C), Raleigh.
- North Dakota:** Richard Emery (M), Bismarck.
- Northwest Texas:** George H. Quarterman, Amarillo.
- Northern Indiana:** Reginald Mallett, Bend.
- Northern Michigan:** Herman R. Menominee.
- Ohio:** Nelson M. Burroughs, Cleveland.
- Oklahoma:** Chilton Powell, Oklahoma City.
- Olympia (Wash.):** William F. Seattle.
- Oregon:** James W. F. Carman, Portland.
- Panama Canal Zone:** Reginald H. G. (M), Ancon.
- Pennsylvania:** Oliver J. Hart, J. G. Armstrong (S), Philadelphia.
- Philippines:** Lyman C. Ogilby (M), I. C. Cabanban (S), Manila.
- Pittsburgh:** Austin Pardue, William Thomas (S).
- Puerto Rico:** Albert E. Swift (M), San Juan.
- Quincy (Ill.):** William Lickfield.
- Rhode Island:** John S. Higgins, Providence, R. I.
- Rochester (N. Y.):** Dudley S. Stark.
- Sacramento (Calif.):** Clarence B. E. Jr.
- Salina (Kans.):** Arnold M. Lewis (M).

aguin (Calif.): Sumner F. D. Wal-
(M), Stockton.
Dakota: Conrad H. Gesner (M),
Falls.
Florida: Henry I. Louttit, William
oses (S), Winter Park.
rn Brazil: Egmont M. Krischke (M),
Alegre.
rn Ohio: Roger W. Blanchard, Cin-
ti.
rn Virginia: George P. Gunn, Nor-
David S. Rose (S), Petersburg.
estern Brazil: Plinio L. Simões (M),
a Maria.
estern Virginia: William H. Mar-
Roanoke.
e (Wash.): Russell S. Hubbard (M).
ield (Ill.): Charles A. Clough.
see: Theodore N. Barth, Memphis;
Vander Horst (S), Chattanooga.
John E. Hines, Houston; James P.
ents (S), Austin; Percy Goddard
Tyler.

Upper South Carolina: C. Alfred Cole,
Columbia, S. C.
Utah: Richard S. Watson (M), Salt Lake
City.
Vermont: vacant.
Virginia: Robert F. Gibson, Jr., Samuel B.
Chilton (S), Richmond.
Washington (D. C.): Angus Dun, William
F. Creighton (C).
West Missouri: Edward R. Welles, Grand-
view.
West Texas: Everett H. Jones, R. Earl
Dicus (S), San Antonio.
West Virginia: Wilburn C. Campbell,
Charleston.
Western Massachusetts: Robert M. Hatch,
Springfield.
Western Michigan: Charles E. Bennison,
Grand Rapids.
Western New York: Lauriston L. Scaife,
Buffalo.
Western North Carolina: M. George Henry,
Asheville, N. C.
Wyoming: James W. Hunter (M), Laramie.

Bishops of The Methodist Church

Source: Methodist Information, New York City.

at: Bishop Gerald Kennedy, Los Angeles, Calif. President-designate: Bishop Paul
artin. Secretary: Bishop Roy H. Short, 201 Eighth Ave. So., Nashville, Tenn.

Alton; Madison, Wis.
Amstutz; Singapore, Malaya.
berto Barbieri; Buenos Aires.
S. Booth; Elisabethville, Congo.
W. Brashares; Chicago, Ill.
nen; China.
v W. Clair, Jr.; St. Louis, Mo.
a W. Copeland; Lincoln, Nebr.
Corson; Philadelphia, Pa.
Dodge; Salisbury, Southern Rho-

d Ensley; Des Moines, Iowa.
M. Frank; St. Louis, Mo.
A. Franklin; Jackson, Miss.
Galloway; San Antonio, Tex.
Garber; Richmond, Va.
Garrison; Aberdeen, S. Dak.
F. Golden; Nashville, Tenn.
ond Grant; Portland, Oreg.
J. Gum; Louisville, Ky.
gen; Stockholm, Sweden.
rdin, Jr.; Columbia, S. C.
Harmon; Charlotte, N. C.
L. Harris; Atlanta, Ga.
Y. Henley; Jacksonville, Fla.
a G. Hodge; Birmingham, Ala.
Holloway; Charleston, W. Va.
Kennedy; Los Angeles, Calif.
sley Lord; Washington, D. C.
Love; Baltimore, Md.
Martin; Houston, Tex.

William C. Martin; Dallas, Tex.
James K. Mathews; Boston, Mass.
W. Vernon Middleton; Pittsburgh, Pa.
Shot K. Mondol; Delhi, India.
Noah W. Moore, Jr.; New Orleans, La.
T. Otto Nall; Minneapolis, Minn.
Everett W. Palmer; Seattle, Wash.
Glenn R. Phillips; Denver, Colo.
W. Kenneth Pope; Little Rock, Ark.
Richard C. Raines; Indianapolis, Ind.
Marshall R. Reed; Detroit, Mich.
Julio Manuel Sabanes; Santiago, Chile.
Roy H. Short; Nashville, Tenn.
Ferdinand Sigg, Zürich, Switzerland.
Mangal Singh; Bombay, India.
Eugene Slater; Topeka, Kans.
John Owen Smith; Atlanta, Ga.
W. Angie Smith; Oklahoma City, Okla.
B. Foster Stockwell; Lima, Peru.
John A. Subhan; Hyderabad, India.
Gabriel Sundaram; Lucknow, India.
Prince Albert Taylor; Monrovia, Liberia.
Donald H. Tippet; San Francisco, Calif.
José Valencia; Manila, Philippines.
Edwin E. Voigt; Springfield, Ill.
Aubrey G. Walton; New Orleans, La.
W. Ralph Ward, Jr.; Syracuse, N. Y.
Hazen G. Werner; Columbus, Ohio.
Lloyd C. Wicke; New York, N. Y.
Friedrich Wunderlich; Frankfurt, Germany.

Archbishops of Canterbury

Sequence	Name	Created	Sequence	Name	C
1	Augustine (consecrated Bishop 597)	601	50	Robert Winchelsea	
2	Laurentius	604	51	Walter Reynolds	
3	Mellitus	619	52	Simon Mepeham	
4	Justus	624	53	John de Stratford	
5	Honorius	627	54	Thomas Bradwardine	
6	Deusdedit	655	55	Simon Islip	
7	Theodorus	668	56	Simon Langham	
8	Beorhtweald	692	57	William Whittlesey	
9	Tatwine	731	58	Simon of Sudbury	
10	Nothelm	735	59	William Courtenay	
11	Cuthbeorht	740	60	Thomas Arundel	
12	Breguwine	761	61	Roger Walden	
13	Jaenbeorht	765	62	Thomas Arundel (restored)	
14	Æthelheard	793	63	Henry Chicheley	
15	Wulfred	805	64	John Stafford	
16	Feologild	832	65	John Kemp	
17	Ceolnoth	833	66	Thomas Bouchier	
18	Æthelred	870	67	John Morton	
19	Plegmund	890	68	Henry Dean	
20	Æthelhelm	914	69	William Warham	
21	Wulfhelm	923	70	Thomas Cranmer	
22	Oda	942	71	Reginald Pole	
23	Ælfsige	959	72	Matthew Parker	
24	Beorhthelm	959	73	Edmund Grindal	
25	Dunstan	959	74	John Whitgift	
26	Æthelgar	988	75	Richard Bancroft	
27	Sigeric Serio	990	76	George Abbot	
28	Ælfric	995	77	William Laud	
29	Ælfheah	1005	78	William Juxon	
30	Lyfing	1013	79	Gilbert Sheldon	
31	Æthelnoth	1020	80	William Sancroft	
32	Eadsige	1038	81	John Tillotson	
33	Robert (Champart) of Jumlièges	1051	82	Thomas Tenison	
34	Stigand	1052	83	William Wake	
35	Lanfranc	1070	84	John Potter	
36	Anselm	1093	85	Thomas Herring	
37	Ralph d'Escures	1114	86	Matthew Hutton	
38	William de Corbell	1123	87	Thomas Secker	
39	Theobald	1138	88	Frederick Cornwallis	
40	Thomas à Becket	1162	89	John Moore	
41	Richard (of Dover)	1174	90	Charles Manners-Sutton	
42	Baldwin	1185	91	William Howley	
43	Hubert Walter	1193	92	John Bird Sumner	
44	Stephen Langton	1207	93	Charles Thomas Longley	
45	Richard le Grant (of Wetharshed)	1229	94	Archibald Campbell Tait	
46	Edmund Rich	1234	95	Edward White Benson	
47	Boniface of Savoy	1245	96	Frederick Temple	
48	Robert Kilwardby	1273	97	Randall Thomas Davidson	
49	John Pecham (Peckham)	1279	98	Cosmo Gordon Lang	
			99	William Temple	
			100	Geoffrey Francis Fisher	

(NOTE: Anglicans consider the line of Archbishops unbroken from Augustine to the present day. Roman Catholics consider the office vacant since 1558, the death of Pole.)

History of the Christian Church in England

5th century	Arrival in England of Angles, Saxons and Jutes. Church isolated from Rome.	1646	Puritan rebellion. Presbyterianism becomes state religion.
597	Augustine sent to convert Saxons.	1660	Restoration. Power of Church of England restored under Charles II.
1534	Act of Supremacy makes king head of Church of England.	1739	John Wesley founds Methodist movement.
1554	Church again united with Rome under reign of Mary.	1829	Catholic emancipation.
1558	Church restored to Crown at accession of Elizabeth.	1833-45	Oxford Movement attempts to bring Church of England back to ideals of ancient Christianity. This movement continues to have a powerful influence.
1611	King James version of Bible.		

Roman Catholic Pontiffs

Source: *The National Catholic Almanac.*

ter, of Bethsaida in Galilee, Prince of the Apostles, was the first Pope. He resided first in and then for twenty-five years in Rome, where he suffered martyrdom in 64 or 67 of the modern was followed by St. Linus.

	Birthplace	Accession	End of reign	Name	Birthplace	Accession	End of reign
us	Tuscia	67	76	Sabinianus	Tuscia	604	606
cletus	Rome	76	88	Boniface III	Rome	607	607
(s)				St. Boniface IV	Marsi	608	615
ent	Rome	88	97	St. Deusdedit	Rome	615	618
istus	Greece	97	105	(Adeodatus I)			
ander I	Rome	105	115	Boniface V	Naples	619	625
us I	Rome	115	125	Honorius I	Campania	625	638
phorus	Greece	125	136	Severinus	Rome	640	640
inus	Greece	136	140	John IV	Dalmatia	640	642
I	Aquileia	140	155	Theodore I	Greece	642	649
etus	Syria	155	166	St. Martin I	Todi	649	655
r	Campania	166	175	St. Eugenius I	Rome	654	657
therius	Epirus	175	189	St. Vitalian	Segni	657	672
or I	Africa	189	199	Adeodatus II	Rome	672	676
yrinus	Rome	199	217	Donus	Rome	676	678
stus I	Rome	217	222	St. Agatho	Sicily	678	681
n I	Rome	222	230	St. Leo II	Sicily	682	683
lian	Rome	230	235	St. Benedict II	Rome	684	685
rus	Greece	235	236	John V	Syria	685	686
an	Rome	236	250	Conon	Unknown	686	687
aelius	Rome	251	253	St. Sergius I	Syria	687	701
us I	Rome	253	254	John VI	Greece	701	705
hen I	Rome	254	257	John VII	Greece	705	707
us II	Greece	257	258	Sisinnius	Syria	708	708
yslius	Unknown	259	268	Constantine	Syria	708	715
t I	Rome	269	274	St. Gregory II	Rome	715	731
chian	Luni	275	283	St. Gregory III	Syria	731	741
s	Dalmatia	283	296	St. Zachary	Greece	741	752
cellinus	Rome	296	304	Stephen II	Rome	752	752
cellus I	Rome	308	309	Stephen III	Rome	752	757
blius	Greece	309	309	St. Paul I	Rome	757	767
hiades	Africa	311	314	Stephen IV	Sicily	768	772
ester I	Rome	314	335	Adrian I	Rome	772	795
us	Rome	336	336	St. Leo III	Rome	795	816
us I	Rome	337	352	Stephen V	Rome	816	817
rius	Rome	352	366	St. Paschal I	Rome	817	824
asus I	Spain	366	384	Eugenius II	Rome	824	827
ius	Rome	384	399	Valentine	Rome	827	827
stasius I	Rome	399	401	Gregory IV	Rome	827	844
cent I	Albano	401	417	Sergius II	Rome	844	847
nus	Greece	417	418	St. Leo IV	Rome	847	855
face I	Rome	418	422	Benedict III	Rome	855	858
tine I	Campania	422	432	St. Nicholas	Rome	858	867
us III	Rome	432	440	Adrian II	Rome	867	872
I	Tuscia	440	461	John VIII	Rome	872	882
reat)				Marinus I	Gallese	882	884
y	Sardo	461	468	St. Adrian III	Rome	884	885
ilcius	Tivoli	468	483	Stephen VI	Rome	885	891
III (II)	Rome	483	492	Formosus	Portus	891	896
sius I	Africa	492	496	Boniface VI	Rome	896	896
us II	Rome	496	498	Stephen VII	Rome	896	897
nachus	Sardo	498	514	Romanus	Gallese	897	897
aisdas	Frosinone	514	523	Theodore II	Rome	897	897
I	Tuscia	523	526	John IX	Tivoli	898	900
IV (III)	Sannio	526	530	Benedict IV	Rome	900	903
II	Rome	530	532	Leo V	Ardea	903	903
	Rome	533	535	Sergius III	Rome	904	911
itus I	Rome	535	536	Anastasius III	Rome	911	913
rius	Campania	536	537	Landus	Sabina	913	914
	Rome	537	555	John X	Tossignano	914	928
I	Rome	556	561	Leo VI	Rome	928	928
	Rome	561	574	Stephen VIII	Rome	928	931
I	Rome	575	579	John XI	Rome	931	935
II	Rome	579	590	Leo VII	Rome	936	939
ory I	Rome	590	604	Stephen IX	Rome	942	942
reat)				Marinus II	Rome	942	946

Name	Birthplace	Accession	End of reign	Name	Birthplace	Accession
Agapitus II	Rome	946	955	Bl. Benedict XI	Treviso	1303
John XII	Tusculum	955	964	Clement V	France	1305
Leo VIII	Rome	963	965	John XXII	Cahors	1316
Benedict V	Rome	964	966	Benedict XII	France	1334
John XIII	Rome	965	972	Clement VI	France	1342
Benedict VI	Rome	973	974	Innocent VI	France	1352
Benedict VII	Rome	974	983	Bl. Urban V	France	1362
John XIV	Pavia	983	984	Gregory XI	France	1370
John XV	Rome	985	996	Urban VI	Naples	1378
Gregory V	Saxony	996	999	Boniface IX	Naples	1389
Sylvester II	Alvernia	999	1003	Innocent VII	Sulmona	1404
John XVII	Rome	1003	1003	Gregory XII	Venetia	1408
John XVIII	Rome	1004	1009	Martin V	Rome	1417
Sergius IV	Rome	1009	1012	Eugene IV	Venetia	1431
Benedict VIII	Tusculum	1012	1024	Nicholas V	Sarzana	1447
John XIX	Tusculum	1024	1032	Callistus III	Valencia	1455
Benedict IX*	Tusculum	1032	1044	Plus II	Siena	1458
Sylvester III	Rome	1045	1045	Paul II	Venetia	1464
Benedict IX (2nd time)	....	1045	1045	Sixtus IV	Savona	1471
Gregory VI	Rome	1045	1046	Innocent VIII	Genoa	1484
Clement II	Saxony	1046	1047	Alexander VI	Valencia	1492
Benedict IX (3rd time)	....	1047	1048	Plus III	Siena	1503
Damasus II	Bavaria	1048	1048	Julius II	Savona	1503
St. Leo IX	Eglsheim-Dagsburg	1049	1054	Leo X	Florence	1513
Victor II	Dollnstein-Hirschberg	1055	1057	Adrian VI	Utrecht	1522
Stephen X	Lorraine	1057	1058	Clement VII	Florence	1523
Nicholas II	Burgundy	1059	1061	Paul III	Rome	1534
Alexander II	Milan	1061	1073	Julius III	Rome	1550
St. Gregory VII	Tuscia	1073	1085	Marcellus II	Montepulciano	1555
Bl. Victor III	Benevento	1086	1087	Paul IV	Naples	1555
Bl. Urban II	France	1088	1099	Pius IV	Milan	1559
Paschal II	Ravenna	1099	1118	St. Pius V	Bosco	1566
Gelasius II	Gaeta	1118	1119	Gregory XIII	Bologna	1572
Callistus II	Burgundy	1119	1124	Sixtus V	Grottoammare	1585
Honorius II	Flagnano	1124	1130	Urban VII	Rome	1590
Innocent II	Rome	1130	1143	Gregory XIV	Cremona	1590
Celestine II	Città di Castello	1143	1144	Innocent IX	Bologna	1591
Lucius II	Bologna	1144	1145	Clement VIII	Florence	1592
Bl. Eugene III	Pisa	1145	1153	Leo XI	Florence	1605
Anastasius IV	Rome	1153	1154	Paul V	Rome	1605
Adrian IV	England	1154	1159	Gregory XV	Bologna	1621
Alexander III	Siena	1159	1181	Urban VIII	Florence	1623
Lucius III	Lucca	1181	1185	Innocent X	Rome	1644
Urban III	Milan	1185	1187	Alexander VII	Siena	1655
Gregory VIII	Benevento	1187	1187	Clement IX	Pistoia	1667
Clement III	Rome	1187	1191	Clement X	Rome	1670
Celestine III	Rome	1191	1198	Innocent XI	Como	1676
Innocent III	Anagni	1198	1216	Alexander VIII	Venetia	1689
Honorius III	Rome	1216	1227	Innocent XII	Naples	1691
Gregory IX	Anagni	1227	1241	Clement XI	Urbino	1700
Celestine IV	Milan	1241	1241	Innocent XIII	Rome	1721
Innocent IV	Genoa	1243	1254	Benedict XIII	Rome	1724
Alexander IV	Anagni	1254	1261	Clement XII	Florence	1730
Urban IV	Troyes	1261	1264	Benedict XIV	Bologna	1740
Clement IV	France	1265	1268	Clement XIII	Venetia	1758
Bl. Gregory X	Placenza	1271	1276	Clement XIV	Rimini	1769
Bl. Innocent V	Savoy	1276	1276	Pius VI	Cesena	1775
Adrian V	Genoa	1276	1276	Pius VII	Cesena	1800
John XXI	Portugal	1276	1277	Leo XII	Fabriano	1823
Nicholas III	Rome	1277	1280	Pius VIII	Cingoli	1829
Martin IV	France	1281	1285	Gregory XVI	Belluno	1831
Honorius IV	Rome	1285	1287	Pius IX	Senigallia	1846
Nicholas IV	Ascoli	1288	1292	Leo XIII	Carpineto	1878
St. Celestine V	Isernia	1294	1294	St. Pius X	Riese	1903
Boniface VIII	Anagni	1294	1303	Benedict XV	Genoa	1914
				Pius XI	Desio	1922
				Pius XII	Rome	1939
				John XXIII	Sotto il Monte	1958

* If the triple removal of Benedict IX was not valid, Sylvester III, Gregory VI and Clement II were antipopes.
 NOTE: This list of Popes, adapted from the *Annuario Pontificio*, is in accordance with the recent revisions of Monsignor Mercati, Prefect of the Vatican's archives. All Popes before Sylvester I are listed as martyrs; other Popes were: St. John I, St. Silverius and St. Martin I. The accession year is that during which the Pope was elected.

The College of Cardinals

Cardinal Bishops

Name	Office or dignity	Nationality
Eugene Tisserant	Bishop of Ostia, Porto, and Santa Rufina; Dean of the Sacred College of Cardinals; Secretary of the Sacred Congregation for the Oriental Church; Prefect of the Sacred Congregation of Ceremonies; Librarian and Archivist of the Holy Roman Church; Chamberlain of the Sacred College.	French
Clemente Micara	Bishop of Velletri; Vicar General of Rome	Italian
Giuseppe Pizzardo	Bishop of Albano; Secretary of the Supreme Sacred Congregation of the Holy Office; Prefect of the Sacred Congregation of Seminaries and Universities	Italian
Benedetto Aloisi Masella	Bishop of Palestrina; Prefect of the Sacred Congregation of the Sacraments; Archpriest of St. John Lateran's Basilica; Prefect of the Sacred Congregation of Sacramental Discipline; Chamberlain of the Holy Roman Church	Italian
Gaetano Cicognani	Bishop of Frascati; Member of the Sacred Congregation of the Basilica of St. Peter, the Consistorial Congregation, the Sacred Congregations of the Council and the Sacraments	Italian
Marcello Mimmi	Bishop of Sabina; Secretary of the Sacred Consistorial Congregation	Italian

Cardinal Priests

Joseph Ernest Van Roey	Archbishop of Malines	Belgian
Manuel Goncalves Cerejeira	Patriarch of Lisbon	Portuguese
Charles Lienart	Bishop of Lille	French
Aurilio Fossati	Archbishop of Turin	Italian
Alia dalla Costa	Archbishop of Florence	Italian
Ignazio Tappouni	Syrian Patriarch of Antioch	Iraqian
Antoni Copello	Chancellor of the Holy Roman Church	Argentine
Gerard Marie Gerlier	Archbishop of Lyon	French
Gregory Peter XV Agagianian	Prefect of the Sacred Congregation for the Propagation of the Faith	Armenian
James McGuigan	Archbishop of Toronto	Canadian
Emile Roques	Archbishop of Rennes	French
Carlo Carmelo de Vasconcelos Motta	Archbishop of São Paulo	Brazilian
Norman Gilroy	Archbishop of Sydney	Australian
Francis J. Spellman	Archbishop of New York	American
Teodosio Clemente de Gouveia	Archbishop of Lourenço Marques, Mozambique	Portuguese
Almeida de Barros Camara	Archbishop of Rio de Janeiro; Ordinary for Oriental Catholics in Brazil	Brazilian
Enrique Pla y Deniel	Archbishop of Toledo and Primate of Spain	Spanish
Manuel Arteaga	Archbishop of Havana	Cuban
Y Betancourt		
Joseph Frings	Archbishop of Cologne	German

Year of creation	Name	Office or dignity	Nationality
1946	Jozsef Mindszenty	Archbishop of Esztergom and Primate of Hungary	Hungarian
1946	Ernesto Ruffini	Archbishop of Palermo; Apostolic Administrator of the Byzantium Rite Eparchy of Piani Dei Greci	Italian
1946	Antonio Caggiano	Archbishop of Buenos Aires	Argentine
1946	Thomas Tien, S. V. D.	Archbishop of Peiping	Chinese
1953	Augusto Alvaro da Silva	Archbishop of San Salvador in Bahia	Brazilian
1953	Valerio Valeri	Prefect of Sacred Congregation of Affairs of Religious	Italian
1953	Pietro Ciriaci	Prefect of Sacred Congregation of the Council	Italian
1953	Maurice Feltin	Archbishop of Paris	French
1953	Carlos Maria de la Torre	Archbishop of Quito	Ecuadorian
1953	Giuseppe Siri	Archbishop of Genoa	Italian
1953	John F. D'Alton	Archbishop of Armagh, Primate of all Ireland	Irish
1953	James Francis McIntyre	Archbishop of Los Angeles	American
1953	Giacomo Lercaro	Archbishop of Bologna	Italian
1953	Stefan Wyszynski	Archbishop of Gniezno and Warsaw	Polish
1953	Benjamin de Arriba y Castro	Archbishop of Tarragona	Spanish
1953	Fernando Quiroga y Palacios	Archbishop of Santiago di Compostela	Spanish
1953	Paul Émile Leger, S.S.	Archbishop of Montreal	Canadian
1953	Valerian Gracias	Archbishop of Bombay	Indian
1953	Josef Wendel	Archbishop of Munich and Freising	German
1958	Giovanni Battista Montini	Archbishop of Milan	Italian
1958	Giovanni Urbani	Patriarch of Venice	Italian
1958	Paolo Giobbe	Apostolic Datary	Italian
1958	Giuseppe Fietta	Member of Roman Curia	Italian
1958	Fernando Cento	Member of Roman Curia	Italian
1958	Carlo Chiarlo	Member of Roman Curia	Italian
1958	Amleto Giovanni Cicognani	Member of Roman Curia	Italian
1958	José Garibi y Rivera	Archbishop of Guadalajara	Mexican
1958	Antonio Maria Barbieri	Archbishop of Montevideo	Uruguayan
1958	William Godfrey	Archbishop of Westminster, London	British
1958	Carlo Confalonieri	Secretary of the Sacred Congregation for Seminaries and Universities	Italian
1958	Richard James Cushing	Archbishop of Boston	American
1958	Alfonso Castaldo	Archbishop of Naples	Italian
1958	Paul Marie A. Richaud	Archbishop of Bordeaux	French
1958	John F. O'Hara, C.S.C.	Archbishop of Philadelphia	American
1958	José M. Bueno y Monreal	Archbishop of Seville	Spanish
1958	Franziskus König	Archbishop of Vienna	Austrian
1958	Julius Döpfner	Bishop of Berlin	German
1958	Domenico Tardini	Secretary of State of the Holy See	Italian
1959	Paolo Marella		Italian
1959	Gustavo Testa		Italian
1959	Aloysius J. Muench	Sacred Congregations for the Oriental Church, for Extraordinary Ecclesiastical Affairs, and of the Basilica of St. Peter	American
1959	Albert G. Meyer	Sacred Congregations for Extraordinary Ecclesiastical Affairs, of Rites, and of Religious	American
1960	Luigi Traglia	Sacred Congregations for the Propagation of the Faith, of Seminaries and Universities, and of the Basilica of St. Peter	Italian
1960	Peter Tatsuo Doi	Vicegerent of Rome Archbishop of Tokyo	Japanese

Name	Office or dignity	Nationality
Joseph Lefebvre	Archbishop of Bourges	French
Bernard Jan Alfrink	Archbishop of Utrecht	Dutch
Lufrino J. Santos	Archbishop of Manila	Philippino
Isidore Mburumba Rurambwa	Bishop of Rutabo, Tanganyika	African

Cardinal Deacons

Nicola Canali	Grand Penitentiary; President of the Commission charged with the Administration of Vatican City	Italian
Alfredo Ottaviani	Pro-Secretary of the Supreme Congregation of the Holy Office	Italian
Alberto di Jorio	Member of Roman Curia	Italian
Francesco Bracci	Secretary of the Sacred Congregation of the Sacraments	Italian
Francesco Roberti	Secretary of the Sacred Congregation of the Council	Italian
André Jullien	Member of Roman Curia	French
William T. Heard	Sacred Congregation of Sacramental Discipline, The Supreme, the Supreme Tribunal of the Apostolic Signature, and the Pontifical for the Codification of Oriental Canon Law	Scotch
Augustine Bea, S.J.	Sacred Congregations of Rites and of Seminaries and Universities and the Pontifical Commission for Biblical Studies	German
Radamiro Larraona, C.M.F.	Sacred Congregations of the Council and of Religious, and the Pontifical Commission for the Authentic Interpretation of the Code of Canon Law	Spanish
Francesco Morano	Sacred Congregations of Sacramental Discipline and of Ceremonies, and the Supreme Tribunal of the Apostolic Signature	Italian
Antonio Bacchi	Secretary of Briefs to Princes	Italian

Roman Catholic Hierarchy of the U. S.

Source: National Catholic Welfare Conference, Washington, D. C.

A—Auxiliary; C—Coadjutor. Archbishops are shown in boldface type, Bishops in lightface. An Archbishop heading a diocese is called an "Archbishop *ad Personam*"; i.e., he bears the personal title of Bishop. The Apostolic Delegate to the U. S. is Archbishop Egidio Vagnozzi.)

Archdioceses

Albany, N. Y.: John J. McQuinn (A); John J. McQuinn (A).	Louisville, Ky.: John A. Floersch; Charles G. Maloney (A).
Anchorage, Alaska: William J. Danneberg (A).	Milwaukee, Wis.: William E. Cousins; Roman R. Atkielski (A).
Ann Arbor, Mich.: John F. Dearden; A. M. MacKenzie (A); Jeremiah E. Mini- (A); Thomas J. Riley (A).	Newark, N. J.: Thomas A. Boland; Martin W. Stanton (A); Walter Curtis (A).
Asheville, N. C.: Albert G. Meyer; Bernard J. (A); Wm. D. O'Brien (A); Ray- P. Hillinger (A).	New Orleans, La.: Joseph F. Rummel; L. Abel Caillouet (A).
Astoria, Ore.: Karl J. Alter; Paul F. (A).	New York, N. Y.: Francis Cardinal Spellman; Stephen J. Donahue (A); Joseph F. Flannelly (A); Fulton J. Sheen (A); Edward V. Dargin (A); Joseph M. Pernicone (A); Raymond A. Lane; Paul Yu Pin; James H. Griffiths (A); William R. Arnold (A); Philip J. Furlong (A); John M. Fearn (A); John J. McGuire (A).
Baltimore, Md.: Francis P. Keough; Jerome (A).	Omaha, Nebr.: Gerald T. Bergan.
Boston, Mass.: Richard Cardinal Cushing; (A); Thomas J. Riley (A).	Philadelphia, Pa.: Cletus J. Benjamin (A); Francis J. Furey (A); Joseph McShea (A); Joseph Mary Yuen Ching Ping (A).
Butte, Mont.: Urban J. Vehr.	Portland, Oreg.: Edward D. Howard.
Chicago, Ill.: Albert G. Meyer; Bernard J. (A); Wm. D. O'Brien (A); Ray- P. Hillinger (A).	St. Louis, Mo.: Joseph E. Ritter; Leo C. Byrne (A); Glennon P. Flavin (A).
Cincinnati, Ohio: Karl J. Alter; Paul F. (A).	
Colorado Springs, Colo.: Urban J. Vehr.	
Cleveland, Ohio: Karl J. Alter; Paul F. (A).	
Columbus, Ohio: Karl J. Alter; Paul F. (A).	
Dayton, Ohio: Karl J. Alter; Paul F. (A).	
Des Moines, Iowa: Leo Binz; George J. (A).	
Detroit, Mich.: John F. Dearden; A. M. MacKenzie (A); Jeremiah E. Mini- (A); Thomas J. Riley (A).	
Evangelical, Conn.: Henry J. O'Brien; John F. (A).	
Indianapolis, Ind.: Paul C. Schulte.	
Kansas City, Kans.: Edward J. Hunkeler.	
Los Angeles, Calif.: James Francis Cardinal (A); Timothy Manning (A); Alden (A).	

St. Paul, Minn.: William O. Brady; Leonard P. Cowley (A).
 San Antonio, Tex.: Robert E. Lucey; Stephen A. Leven (A).
 San Francisco, Calif.: John J. Mitty; Hugh A. Donohoe (A); Merlin J. Guilfoyle (A).
 Santa Fe, N. Mex.: Edwin V. Byrne.
 Seattle, Wash.: Thomas A. Connolly; Thomas E. Gill (A).
 Washington, D. C.: Patrick A. O'Boyle; John M. McNamara (A); Philip M. Hannan (A).

Dioceses

Alaska (vicariate): Francis D. Gleeson, S.J., Vicar Apostolic.
 Albany, N. Y.: William A. Scully; Edward J. Maginn (A).
 Alexandria, La.: Charles P. Greco.
 Altoona-Johnstown, Pa.: Joseph C. McCormick.
 Amarillo, Tex.: John L. Morkovsky.
 Atlanta, Ga.: Francis E. Hyland.
 Austin, Tex.: Louis J. Reicher.
 Bahamas (Vicariate): Paul L. Hagarty, O.S.B., Vicar Apostolic.
 Baker City, Oreg.: Francis P. Leipzig.
 Belleville, Ill.: Albert R. Zuroweste.
 Bismarck, N. Dak.: Hilary B. Hacker.
 Boise, Idaho: James J. Byrne.
 Bridgeport, Conn.: Lawrence J. Shehan.
 Brooklyn, N. Y.: Bryan J. McEntegart; J. J. Boardman (A); Joseph P. Denning (A); Charles R. Mulrooney (A).
 Buffalo, N. Y.: Joseph A. Burke; Leo R. Smith (A).
 Burlington, Vt.: R. F. Joyce.
 Camden, N. J.: Celestine J. Damiano.
 Caroline-Marshall Islands (vicariate): Vincent I. Kennally.
 Charleston, S. C.: Paul J. Hallinan.
 Cheyenne, Wyo.: Hubert M. Newell.
 Cleveland, Ohio: Edward F. Hoban; Floyd L. Begin (A); John J. Krol (A).
 Columbus, Ohio: Clarence G. Issenmann; Edward G. Hettinger (A).
 Corpus Christi, Tex.: Mariano S. Garriga; Adolph Marx (A).
 Covington, Ky.: Richard Ackerman.
 Crookston, Minn.: Laurence A. Glenn.
 Dallas-Ft. Worth, Tex.: Thomas K. Gorman; Augustine Danglermayr (A).
 Davenport, Iowa: Ralph L. Hayes.
 Des Moines, Iowa: Edward C. Daly, O.P.
 Dodge City, Kans.: Marion F. Forst.
 Duluth, Minn.: Francis J. Schenk.
 El Paso, Tex.: Sidney M. Metzger.
 Erie, Pa.: John M. Gannon; Edward P. McManaman (A).
 Evansville, Ind.: Henry J. Grimmelsman.
 Fall River, Mass.: James L. Connolly; James J. Gerrard (A).
 Fargo, N. Dak.: Leo F. Dworschak.
 Fort Wayne, Ind.: Leo A. Pursley.
 Gallup, N. Mex.: B. T. Espelage, O.F.M.
 Galveston, Tex.: Wendell J. Nold.
 Gary, Ind.: A. G. Grutka.
 Grand Island, Nebr.: John L. Paschar.
 Grand Rapids, Mich.: Allen J. Babcock.
 Great Falls, Mont.: William J. Condon.
 Green Bay, Wis.: Stanislaus V. Bona; B. Grellinger (A).
 Greensburg, Pa.: William G. Connare.
 Guam (vicariate): Apollinaris W. B. Gartner, O.F.M. Cap., Vicar Apostolic.
 Harrisburg, Pa.: George L. Leech; Lawrence F. Schott (A).
 Helena, Mont.: Joseph M. Gilmore.
 Honolulu: J. J. Sweeney; J. J. Scanlan.
 Jamaica (Vicariate): John J. McEllis, S.J., Vicar Apostolic.
 Jefferson City, Mo.: Joseph H. Maloney, C.P.P.S.
 Joliet, Ill.: Martin D. McNamara.
 Juneau, Alaska: Dermot O'Flanagan.
 Kansas City-St. Joseph, Missouri: John J. Cody.
 La Crosse, Wis.: John P. Treacy.
 Lafayette, Ind.: John J. Carberry.
 Lafayette, La.: Maurice Schexnayder; Robert E. Tracy (A).
 Lansing, Mich.: Joseph H. Albers.
 Lincoln, Nebr.: Jas. V. Casey.
 Little Rock, Ark.: Albert L. Fletcher.
 Madison, Wis.: William P. O'Connor.
 Manchester, N. H.: Ernest J. Primeau.
 Marquette, Mich.: Thomas L. Noa.
 Miami, Fla.: Coleman F. Carroll.
 Mobile-Birmingham, Ala.: T. J. Tolson; Joseph A. Durick (A).
 Monterey-Fresno, Calif.: Aloysius J. J. Linger, C.Ss.R.; Harry A. Clinch (A).
 Nashville, Tenn.: William L. Adrian.
 Natchez, Miss.: Richard O. Gerow; Joseph Brunini (A).
 New Ulm, Minn.: Alphonse Schadewald.
 Norwich, Conn.: Vincent J. Hines.
 Ogdensburg, N. Y.: J. J. Navagh.
 Oklahoma City-Tulsa, Okla.: Victor Reed.
 Owensboro, Ky.: Francis R. Cotton.
 Paterson, N. J.: James A. McNulty.
 Peoria, Ill.: John B. Franz.
 Pittsburgh, Pa.: John J. Wright.
 Ponce, P. R.: James E. McManus.
 Portland, Maine: Daniel J. Feeney.
 Providence, R. I.: Russell J. McVey; Thomas F. Maloney (A).
 Pueblo, Colo.: Charles A. Buswell.
 Raleigh, N. C.: Vincent S. Waters.
 Rapid City, S. Dak.: William T. Moore, C.Ss.R.
 Reno, Nev.: Robert J. Dwyer.
 Richmond, Va.: John J. Russell; Joseph Hodges (A).
 Rochester, N. Y.: James E. Kearney; Lawrence B. Casey (A).
 Rockford, Ill.: Loras T. Lane.
 Rockville Center, N. Y.: W. P. Keller.
 Sacramento, Calif.: Joseph T. McGuire.
 Saginaw, Mich.: Stephen S. Woznicki.

ustine, Fla.: Joseph P. Hurley.
 ad, Minn.: Peter W. Bartholome.
 Kans.: Frederick W. Freking.
 ke City, Utah: J. Lennox Federal.
 go, Calif.: Charles F. Buddy; Rich-
 I. Ackerman (A).
 an, P. R.: James P. Davis.
 ah, Ga.: Thomas J. McDonough.
 n, Pa.: Jerome D. Hannan; Henry T.
 owski (A).
 ity, Iowa: Joseph M. Mueller.
 alls, S. Dak.: Lambert A. Hoch.
 e, Wash.: Bernard Joseph Topel.
 eld, Ill.: William A. O'Connor.
 eld, Mass.: Christopher J. Weldon.
 eld-Cape Girardeau, Mo.: Charles
 elmsing.
 ville, Ohio: John K. Mussio.
 r, Wis.: George A. Hammes.
 e, N. Y.: Walter A. Foery; David F.
 ingham (A).
 Ohio: George J. Rehiring.
 , N. J.: George W. Ahr; James J.
 n (A).

Tucson, Ariz.: Daniel J. Gercke; Francis J.
 Green (A).
 Wheeling, W. Va.: John J. Swint; Thomas
 J. McDonnell (C).
 Wichita, Kans.: Mark K. Carroll.
 Wilmington, Del.: Michael Hyle.
 Winona, Minn.: Edward A. Fitzgerald.
 Worcester, Mass.: Bernard J. Flanagan.
 Yakima, Wash.: Joseph P. Dougherty.
 Youngstown, Ohio: Emmet M. Walsh;
 James W. Malone (A).
 Military Ordinariate: Francis Cardinal
 Spellman, Military Vicar; William Ar-
 nold, Military Delegate; Philip J. Fur-
 long (A).
 Belmont, N. C. (Abbacy Nullius): Vincent
 G. Taylor, O.S.B. (Abbot).
 Philadelphia, Pa. (Byzantine Rite): Con-
 stantine Bohachevsky; Joseph Schmon-
 diuk (A).
 Pittsburgh, Pa. (Greek Rite): Nicholas T.
 Elko; Stephen Kocisko (A).
 Stamford, Conn. (Ukrainian Greek Catho-
 lic Diocese): Ambrose Senyshyn.

Antipopes

es were those who falsely claimed Papal Sovereignty. The dates and, in some cases, Roman numerals
 names account for occasional discrepancies in the succession of the Popes.

	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
olytus	Rome	217	235	Clement III	Parma	1080	1100
	Rome	251	...	Theodoric	.....	....	1100
	Rome	355	365	Albert	.....	....	1102
	.....	366	367	Sylvester IV	Rome	1105	1111
	.....	418	419	Gregory VIII	France	1118	1121
e	.....	498	501	Celestine II	Rome	....	1124
s	Alexandria	530	530	Anacletus II	Rome	1130	1138
e	.....	....	687	Victor IV	.....	1138	1138
	.....	....	687	Victor IV*	Montecelio	1159	1164
time	Nepi	767	769	Paschal III	.....	1164	1168
	.....	768	768	Callistus III	Arezzo	1168	1178
	.....	....	844	Innocent III	Sezze	1179	1180
us	.....	855	855	Nicholas V	Corvaro	1328	1330
her	Rome	903	904	Clement VII	.....	1378	1394
VII	Rome	974	974	Benedict XIII	Aragon	1394	1423
VII	.....	984	985	Alexander V	Crete	1409	1410
(time)				John XXIII	Naples	1410	1415
VI	Rossano	997	998	Felix V	.....	1439	1449
	.....	....	1012				
X	Rome	1058	1059				
II	Verona	1061	1072				

* Did not recognize his predecessor of 1138, who, only
 two months after claiming the Papacy, submitted to the
 rightful Pope, Innocent II.

Jewish Congregational and Rabbinical Organizations

Conference of American Rabbis:
 th St., New York 23, N. Y.
 ical Alliance of America: 154 Nassau
 York 38, N. Y.
 ical Assembly of America: 3080
 y, New York 27, N. Y.
 ical Council of America, Inc.: 331
 Ave., New York 17, N. Y.
 gue Council of America: 110 W.
 New York 36, N. Y.

Union of American Hebrew Congregations:
 838 Fifth Ave., New York 21, N. Y.

Union of Orthodox Jewish Congregations
 of America: 84 Fifth Ave., New York 11,
 N. Y.

Union of Orthodox Rabbis of the U. S. and
 Canada: 132 Nassau St., New York 38, N. Y.

United Synagogue of America: 3080 Broad-
 way, New York 27, N. Y.

Movable Holidays, 1961 to 1970

CHRISTIAN AND SECULAR

Year	Ash Wed.	Easter	Pentecost	Labor Day	Election Day	Thanksgiving	1st S Adv
1961	Feb. 15	Apr. 2	May 21	Sept. 4	Nov. 7	Nov. 23	Dec.
1962	Mar. 7	Apr. 22	June 10	Sept. 3	Nov. 6	Nov. 22	Dec.
1963	Feb. 27	Apr. 14	June 2	Sept. 2	Nov. 5	Nov. 28	Dec.
1964	Feb. 12	Mar. 29	May 17	Sept. 7	Nov. 3	Nov. 26	Nov.
1965	Mar. 3	Apr. 18	June 6	Sept. 6	Nov. 2	Nov. 25	Nov.
1966	Feb. 23	Apr. 10	May 29	Sept. 5	Nov. 8	Nov. 24	Nov.
1967	Feb. 8	Mar. 26	May 14	Sept. 4	Nov. 7	Nov. 23	Dec.
1968	Feb. 28	Apr. 14	June 2	Sept. 2	Nov. 5	Nov. 28	Dec.
1969	Feb. 19	Apr. 6	May 25	Sept. 1	Nov. 4	Nov. 27	Nov.
1970	Feb. 11	Mar. 29	May 17	Sept. 7	Nov. 3	Nov. 26	Nov.

Shrove Tuesday: 1 day before Ash Wednesday.
 Palm Sunday: 7 days before Easter.
 Maundy Thursday: 3 days before Easter.
 Good Friday: 2 days before Easter.

Holy Saturday: 1 day before Easter.
 Ascension Day: 10 days before Pentecost.
 Trinity Sunday: 7 days after Pentecost.
 Corpus Christi: 11 days after Pentecost.

JEWISH

Year	Purim	1st day Passover	1st day Shabuoth	1st day Rosh Hashana	Yom Kippur	1st day Sukkoth	Simhath Torah	1st Han
1961	Mar. 2	Apr. 1	May 21	Sept. 11	Sept. 20	Sept. 25	Oct. 3	Dec.
1962	Mar. 20	Apr. 19	June 8	Sept. 29	Oct. 8	Oct. 13	Oct. 21	Dec.
1963	Mar. 10	Apr. 9	May 29	Sept. 19	Sept. 28	Oct. 3	Oct. 11	Dec.
1964	Feb. 27	Mar. 28	May 17	Sept. 7	Sept. 16	Sept. 21	Sept. 29	Nov.
1965	Mar. 18	Apr. 17	June 6	Sept. 27	Oct. 6	Oct. 11	Oct. 19	Dec.
1966	Mar. 6	Apr. 5	May 25	Sept. 15	Sept. 24	Sept. 29	Oct. 7	Dec.
1967	Mar. 26	Apr. 25	June 14	Oct. 5	Oct. 14	Oct. 19	Oct. 27	Dec.
1968	Mar. 14	Apr. 13	June 2	Sept. 23	Oct. 2	Oct. 7	Oct. 15	Dec.
1969	Mar. 4	Apr. 3	May 23	Sept. 13	Sept. 22	Sept. 27	Oct. 5	Dec.
1970	Mar. 14	Apr. 15	June 6	Oct. 1	Oct. 10	Oct. 15	Oct. 30	Oct.

Length of Jewish holidays (O = Orthodox, C = Conservative, R = Reform):

Passover: O & C, 8 days (holy days: first 2 and last 2); R, 7 days (holy days: first and last).

Shabuoth: O & C, 2 days; R, 1 day.

Rosh Hashana: O & C, 2 days; R, 1 day.

Yom Kippur: All groups, 1 day.

Sukkoth: All groups, 7 days (holy days: O & C, first 2; R, first only). O & C observe two additional days: Shemini

Atsereth (Eighth Day of the Feast) and Simhath (Rejoicing of the Law). R observes Shemini Atsereth not Simhath Torah.

Hanukkah: All groups, 8 days.

NOTE: All holidays begin at sundown on the evening of the date given.

Religious and Secular Holidays, 1961

(Legal holidays falling on Sunday are observed on Monday)

NEW YEAR'S DAY—Sunday, Jan. 1—A legal holiday in all states and the District of Columbia, New Year's Day has its origin in Roman times, when sacrifices were offered to Janus, the two-faced Roman deity who looked back on the past and forward to the future.

EPIPHANY—Friday, Jan. 6—Falls the twelfth day after Christmas and commemorates the manifestation of Jesus as the Son of God, as represented by the adoration of the Magi, the baptism of Jesus,

and the miracle of the wine at the feast at Cana. Epiphany originally began at the beginning of the carnival season, preceding Lent, and the evening (sometimes the eve) is known as Twelfth Night.

LINCOLN'S BIRTHDAY—Sunday, Feb. 12—A legal holiday in many states. The day was first formally observed in Washington, D. C., in 1866, when both houses of Congress gathered for a memorial service in honor of the late President.

VALENTINE'S DAY—Tuesday, Feb. 14—This day is the festival of two 3rd-century martyrs, both named St. Valentine. It is not known why this day is associated with lovers. It may derive from a pagan festival about this time of year or it may have been inspired by the fact that birds mate on this day.

ASH WEDNESDAY—Feb. 14—Falls the day before Ash Wednesday and marks the beginning of the carnival season, which once began on Epiphany but is now usually observed the last three days before Lent. Hence, the day is known as Mardi Gras (Tuesday), and Mardi Gras celebrations are also held in several American cities, particularly in New Orleans. The day is sometimes called Pancake Tuesday in English because fats, which were forbidden during Lent, had to be used up.

PALM SUNDAY—Feb. 15—The first day of the Lenten season, which lasts forty days. Having its origin sometime before the 10th century, it is a day of public penance and is observed in the Roman Catholic Church by the burning of the palms blessed on the previous day, Palm Sunday. With his thumb, the priest then marks a cross upon the forehead of each worshipper. The Anglican and a few Protestant groups in the United States also celebrate the day, but usually without the use of ashes.

GEORGE WASHINGTON'S BIRTHDAY—Wednesday, Feb. 22—The birthday of George Washington is celebrated as a legal holiday in every state of the Union, the District of Columbia, and all territories. The observance began in 1796.

ST. PATRICK'S DAY—Friday, March 17—St. Patrick, patron saint of Ireland, is honored in America since the 18th century as the day of the nation. There are many parades and meetings but perhaps the most notable part of the observance is the annual St. Patrick's Day parade on Fifth Avenue in New York City.

GOOD FRIDAY—Mar. 26—Is observed the day before Easter to commemorate the death of Jesus into Jerusalem. The tradition and the ceremonies introducing the benediction of palms probably had their origin in Jerusalem.

GOOD FRIDAY—Mar. 31—This day commemorates the Crucifixion, which is observed during services from the Gospel according to St. John. A feature in Roman Catholic churches is the Liturgy of the Hours; there is no Consecration, the day having been consecrated the previous day by the eating of hot cross buns on this day, said to have started in England.

THE DAY OF PASSOVER (Pesach)—Friday, April 1 (Nisan 15)—The Feast

of the Passover, also called the Feast of Unleavened Bread, commemorates the escape of the first-born of the Jews from the Angel of Death. As the Jews fled Egypt, they ate unleavened bread, and from that time the Jews have allowed no leavening in the houses during Passover, bread being replaced by matzoth.

EASTER SUNDAY—April 2—Observed in all Christian churches, Easter commemorates the Resurrection of Jesus. It is celebrated on the first Sunday after the full moon which occurs on or next after March 21 and is therefore celebrated between March 22 and April 25 inclusive. This date was fixed by the Council of Nicaea in 325.

ASCENSION DAY—Thursday, May 11—Took place in the presence of His apostles 40 days after the Resurrection of Jesus. It is traditionally held to have occurred on Mount Olivet in Bethany.

FIRST DAY OF SHABUOTH (Hebrew Pentecost)—Sunday, May 21 (Sivan 6)—This festival, sometimes called the Feast of Weeks, or of Harvest, or of the First Fruits, falls fifty days after Passover and originally celebrated the end of the seven-week grain harvesting season. In later tradition, it also celebrated the giving of the Law to Moses on Mt. Sinai, and both aspects have come down to the present.

PENTECOST (Whitsunday)—May 21—This day commemorates the descent of the Holy Ghost upon the Apostles fifty days after the Resurrection. The sermon by the Apostle Peter, which led to the baptism of 3,000 who professed belief, originated the ceremonies that have since been followed. "Whitsunday" is believed to have come from "white Sunday" when, among the English, white robes were worn by those baptized on the day.

MEMORIAL DAY—Tuesday, May 30—Also known as Decoration Day, Memorial Day is a legal holiday in most of the states and in the territories, and is also observed by the armed forces. In 1868, General John A. Logan, Commander in Chief of the Grand Army of the Republic, issued an order designating the day as one in which the graves of soldiers would be decorated. The holiday was originally devoted to honoring the memory of those who fell in the Civil War, but is now also dedicated to the memory of the dead of all wars.

FLAG DAY—Wednesday, June 14—This day commemorates the adoption by the Continental Congress on June 14, 1777, of the Stars and Stripes as the U. S. flag. Although it is a legal holiday only in Pennsylvania, President Truman, on Aug. 3, 1949, signed a bill requesting the Presi-

dent to call for its observance each year by proclamation.

INDEPENDENCE DAY—Tuesday, July 4—The day of the adoption of the Declaration of Independence in 1776, celebrated in all states and territories. The observance began in the next year in the city of Philadelphia.

LABOR DAY—Monday, Sept. 4—Observed the first Monday in September in all states and territories. Labor Day was first celebrated in New York in 1882 under the sponsorship of the Central Labor Union, following the suggestion of Peter J. McGuire, of the Knights of Labor, that the day be set aside in honor of labor.

FIRST DAY OF ROSH HASHANA (Jewish New Year)—Monday, Sept. 11 (Tishri 1)—This day marks the beginning of the Jewish year 5722 and opens the Ten Days of Penitence closing with Yom Kippur.

YOM KIPPUR (Day of Atonement)—Wednesday, Sept. 20 (Tishri 10)—This day marks the end of the Ten Days of Penitence that began with Rosh Hashana. It is described in *Leviticus* as a "Sabbath of rest," and synagogue services begin the preceding sundown, resume the following morning, and continue through the day to sundown.

FIRST DAY OF SUKKOTH (Feast of Tabernacles)—Monday, Sept. 25 (Tishri 15)—This festival, also known as the Feast of the Ingathering, originally celebrated the fruit harvest, and the name comes from the booths or tabernacles in which the Jews lived during the harvest, although one tradition traces it to the shelters used by the Jews in their wandering through the wilderness. During the festival many Jews build small huts in their back yards or on the roofs of their houses.

COLUMBUS DAY—Thursday, Oct. 12—A legal holiday in many states, commemorating the discovery of America by Columbus in 1492. Quite likely the first celebration of Columbus Day was that organized in 1792 by the Society of St. Tammany, or Columbian Order, more widely known as Tammany Hall.

HALLOWEEN—Tuesday, Oct. 31—The eve of All Saints' Day, formerly called All Hallows and Hallowmass. Halloween is traditionally associated in some countries with old customs such as bonfires, masquerading and the telling of ghost stories. These are old Celtic practices that marked the beginning of winter.

ALL SAINTS' DAY—Wednesday, Nov. 1—This is a Roman Catholic and Anglican holiday celebrating all saints, known and unknown.

ELECTION DAY (in certain states)—Tuesday, Nov. 7—Since 1845, by Act of Congress, the first Tuesday after the first Monday in November is the date for choosing Presidential electors. State elections are also generally held on this day.

VETERANS DAY—Saturday, Nov. 11—Armistice Day was established in 1918 to commemorate the signing in 1918 of the Armistice ending World War I. On July 1, 1954, the name was changed to Veterans Day so as to honor all men and women who have served America in its armed forces.

THANKSGIVING—Thursday, Nov. 22—Observed nationally on the fourth Thursday in November by Act of Congress (1941), the first such national proclamation having been issued by President Lincoln in 1863, on the urging of Sarah J. Hale, editor of *Godey's Lady's Book*. Most Americans believe that the holiday dates back to the day of the first Thanksgiving ordered by Governor Bradford of Plymouth Colony in New England in 1621. Some scholars point out that days of thanksgiving stem from ancient times.

FIRST SUNDAY OF ADVENT—December 3—Advent is the season in which the faithful must prepare themselves for the advent of the Saviour on Christmas. The four days before Christmas are marked by special church services.

FIRST DAY OF HANUKKAH (Festival of Lights)—Sunday, Dec. 3 (Kislev 25)—This festival was instituted by Judas Maccabaeus in 165 B.C. to celebrate the purification of the Temple of Jerusalem, which had been desecrated three years earlier by Antiochus Epiphanes, who set up a pagan altar and offered sacrifices to Zeus Olympus. In Jewish homes, a light is lighted on the first night, and on each succeeding night of the eight-day festival, and the menorah is lighted.

CHRISTMAS (Feast of the Nativity)—Monday, Dec. 25—The most widely celebrated holiday of the Christian year, Christmas is observed as the anniversary of the birth of Jesus. Christmas customs are centuries old. The mistletoe, for example, comes from the Druids, who, in hanging the mistletoe, hoped for peace and good fortune. Use of such plants as holly comes from the ancient belief that such plants blossomed at Christmas. Comparatively recent is the Christmas tree, first set up in Germany in the 17th century, and the custom of candles on trees developed from belief that candles appeared by miracle on the trees at Christmas. Colonial Manhattan Islanders introduced the name Santa Claus, a corruption of the Dutch name of the 4th-century Asia-Minor St. Nicholas.

Legal Holidays in the 50 States, D. C., and Puerto Rico

Holidays Widely Observed

1, New Year's Day: All states, D. C., Puerto Rico.

2, Lincoln's Birthday: Alaska, Arizona, California, Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Montana, New Jersey, New York, New York, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, Wyoming.

22, Washington's Birthday: All states (except Louisiana, Nebraska, Nevada); Puerto Rico.

Memorial (or Decoration) Day: All states (except Alabama, Georgia, Louisiana, North Carolina, Texas); D. C., Puerto Rico.

Independence Day: All states, D. C., Puerto Rico.

1st (1st Monday), Labor Day: All states, Puerto Rico.

12, Columbus Day: All states (except Alaska, Arkansas, D. C., Hawaii, Idaho, Kansas, Louisiana, Maine, Mississippi, Nebraska, Nevada, North Carolina, South Dakota, Tennessee, Virginia, Wyoming); Puerto Rico.

1st (1st Tuesday after 1st Monday), Election Day: Arizona, California, Colorado, Delaware, Florida, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Missouri, Montana, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

11, Veterans Day (formerly Armistice Day): All states (except Louisiana, Nebraska, Ohio); D. C., Puerto Rico.

4th (Thursday), Thanksgiving Day: All states, D. C., Puerto Rico.

25, Christmas: All states, D. C., Puerto Rico.

Other Holidays

Alaska Day.

3, Three Kings' Day: Puerto Rico.

11, De Hostos' Birthday: Puerto Rico.

19, Robert E. Lee's Birthday: Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia.³

20, Inauguration Day (every 4 yrs.):

30, F. D. Roosevelt's Birthday: Ken-

March (1 day before Ash Wednesday) (Shrove Tuesday): Alabama, in some counties), Louisiana.

14, Statehood Day: Arizona.

1st (Tuesday), Town Meeting Day: Ver-

Texas Independence Day.

ated President's Day in Hawaii. ² Even years only. ³ Called Lee-Jackson Day. ⁴ Called Inauguration Day. ⁵ If proclaimed by Governor.

March 15, Andrew Jackson's Birthday: Tennessee. March 17, Evacuation Day: Massachusetts (in Suffolk Co. only).

March or April (2 days before Easter), Good Friday: California (12 M.-3 P.M.), Connecticut, Delaware, Florida, Hawaii, Illinois, Indiana, Louisiana, Maryland, Minnesota, New Jersey, North Dakota, Pennsylvania, Tennessee, Puerto Rico.

March 22, Emancipation Day: Puerto Rico.

March 25, Maryland Day.

March 26, Kuhio Day: Hawaii.

March 30, Seward's Day: Alaska.

April (date set by governor), Arbor Day: Wyo.

April 12, Halifax Resolutions Anniversary: N. C.

April 13, Thomas Jefferson's Birthday: Alabama, Missouri, Oklahoma,⁶ Virginia.

April 16, De Diego's Birthday: Puerto Rico.

April 19, Patriots' Day: Massachusetts.

April 21, San Jacinto Day: Texas.

April 22, Oklahoma Day.⁶

April (last Friday), Arbor Day: Utah.

April 26, Confederate Memorial Day: Alabama, Florida, Georgia, Mississippi.

April (4th Monday), Fast Day: New Hampshire.

May 1, Bird Day: Oklahoma.

May 4, Rhode Island Independence Day.

May (2nd Sunday), Mother's Day: Ariz., Okl.

May 10, Confederate Memorial Day: Louisiana (Baton Rouge only),⁴ North Carolina, South Carolina.

May 20, Mecklenburg Independence Day: N. C.

June 3, Jefferson Davis' Birthday: Alabama, Florida, Georgia, Kentucky, Mississippi, South Carolina, Tennessee,⁵ Texas.

June 9, Senior Citizen's Day: Oklahoma.⁶

June 11, Kamehameha Day: Hawaii.

June 14, Flag Day: Pennsylvania.

June 17, Bunker Hill Day: Massachusetts (in Suffolk Co. only).

June 20, West Virginia Day.

July 13, Nathan Bedford Forrest's Birthday: Tenn.

July 17, Muñoz Rivera's Birthday: Puerto Rico.

July 24, Pioneer Day: Utah.

July 25, Constitution Day: Puerto Rico.

July 27, Barbosa's Birthday: Puerto Rico.

August 1, Colorado Day.

August (1st Thursday), Primary Election Day: Tennessee.²

August 14, V-J Day: Ark., R. I.

August 16, Bennington Battle Day: Vermont.

August 30, Huey P. Long Day: Louisiana.

September (1st Saturday after full moon), Indian Day: Oklahoma.⁶

September 9, Admission Day: California.

September 12, Defenders' Day: Maryland.

September 16, Cherokee Strip Day: Oklahoma.⁶

October (2nd Tuesday), Election Day: Alaska.

October 10, Oklahoma Historical Day.⁶

October 31, Nevada Day

November 1, All Saints' Day: Louisiana.

November 4, Will Rogers Day: Oklahoma.⁶

November 19, Discovery Day: Puerto Rico.

AWARDS



NOBEL PRIZES

The Nobel prizes are awarded under the will of Alfred Bernhard Nobel, Swedish chemist and engineer, died in 1896. The interest of the fund is divided annually among the persons who have made the most outstanding contributions in the field of physics, chemistry, and physiology or medicine, who have produced the most distinguished literary work of an idealist tendency, and who have contributed most toward world peace.

The prizes for physics and chemistry are awarded by the Swedish Academy of Science in Stockholm, the prizes for physiology or medicine by the Caroline Medical Institute in Stockholm, that for literature by the academy in Stockholm, and that for peace by a committee of five elected by the Norwegian Storting. The distribution of prizes was begun on December 10, 1901, the anniversary of Nobel's death. The amount of each prize varies with the income from the fund and since 1936 has stood at approximately £8,000.

N- Nobel prizes were awarded for 1940, 1941 and 1942; prizes for Literature and Peace were not awarded for

Year	Literature	Peace
1901	René F. A. Sully Prudhomme (France)	Henri Dunant (Switzerland) and Frédéric Passy (France)
1902	Theodor Mommsen (Germany)	Elie Ducommun and Albert Gobat (Switzerland)
1903	Björnstjerne Björnson (Norway)	Sir William R. Cremer (England)
1904	Frédéric Mistral (France) and José Echegaray (Spain)	Institut de Droit International (Belgium)
1905	Henryk Sienkiewicz (Poland)	Bertha von Suttner (Austria)
1906	Giosuè Carducci (Italy)	Theodore Roosevelt (U. S.)
1907	Rudyard Kipling (England)	Ernesto T. Moneta (Italy) and Louis Renault (France)
1908	Rudolf Eucken (Germany)	Klas P. Arnoldson (Sweden) and Frederik Bajer (Denmark)
1909	Selma Lagerlöf (Sweden)	Auguste M. F. Beernaert (Belgium) and Baron Paul H. B. B. d'Estournelles de Constant de Rebecque (France)
1910	Paul von Heyse (Germany)	Bureau International Permanent de la Paix (Switzerland)
1911	Maurice Maeterlinck (Belgium)	Tobias M. C. Asser (Holland) and Alfred Fried (Austria)
1912	Gerhart Hauptmann (Germany)	Elihu Root (U. S.)
1913	Rabindranath Tagore (India)	Henri La Fontaine (Belgium)
1915	Romain Rolland (France)	No award
1916	Verner von Heidenstam (Sweden)	No award
1917	Karl Gjellerup (Denmark) and Henrik Pontoppidan (Denmark)	International Red Cross
1919	Carl Spitteler (Switzerland)	Woodrow Wilson (U. S.)
1920	Knut Hamsun (Norway)	Léon Bourgeois (France)
1921	Anatole France (France)	Karl H. Branting (Sweden) and Christiaan Lange (Norway)
1922	Jacinto Benavente (Spain)	Fridtjof Nansen (Norway)
1923	William B. Yeats (Ireland)	No award
1924	Wladyslaw Reymont (Poland)	No award
1925	George Bernard Shaw (England)	Sir Austen Chamberlain (England) and Charles G. Dawes (U. S.)
1926	Grazia Deledda (Italy)	Aristide Briand (France) and Gustav Stresemann (Germany)
1927	Henri Bergson (France)	Ferdinand Buisson (France) and Ludwig Quide (Germany)
1928	Sigrid Undset (Norway)	No award
1929	Thomas Mann (Germany)	Frank B. Kellogg (U. S.)
1930	Sinclair Lewis (U. S.)	Lars O. J. Söderblom (Sweden)
1931	Erik A. Karlfeldt (Sweden)	Jane Addams and Nicholas M. Butler (U. S.)
1932	John Galsworthy (England)	No award
1933	Ivan G. Bunin (Russia)	Sir Norman Angell (England)
1934	Luigi Pirandello (Italy)	Arthur Henderson (England)
1935	No award	Karl von Ossietzky (Germany)
1936	Eugene O'Neill (U. S.)	Carlos de S. Lamas (Argentina)
1937	Roger Martin du Gard (France)	Lord Cecil of Chelwood (England)
1938	Pearl S. Buck (U. S.)	Office International Nansen pour les Réfugiés (Switzerland)
1939	Frans Eemil Sillanpää (Finland)	No award
1944	Johannes V. Jensen (Denmark)	International Red Cross
1945	Gabriela Mistral (Chile)	Cordell Hull (U. S.)
1946	Hermann Hesse (Switzerland)	Emily G. Balch and John R. Mott (U. S.)

Literature

Peace

André Gide (France)	Am. Friends Service Com. (U. S.), Brit. Soc. of Friends' Service Council (Eng.)
Thomas Stearns Eliot (England)	No award
William Faulkner (U. S.)	Lord John Boyd Orr (Scotland)
Bertrand Russell (England)	Ralph J. Bunche (U. S.)
År Lagerkvist (Sweden)	Léon Jouhaux (France)
François Mauriac (France)	Albert Schweitzer (Fr. Eq. Af.)
Winston Churchill (England)	George C. Marshall (U. S.)
Ernest Hemingway (U. S.)	Office of U.N. High Commissioner for Refugees
Halldór Kiljan Laxness (Iceland)	No award
Ramón Jiménez (Spain)	No award
Bert Camus (France)	Lester B. Pearson (Canada)
Boris Pasternak (U.S.S.R.) (declined prize)	Rev. Dominique Georges Henri Pire (Belgium)
Salvatore Quasimodo (Italy)	No award

Physics

Chemistry

Medicine

Wilhelm K. Roentgen, for discovery of Roentgen rays.	Jacobus H. van't Hoff, for laws of chemical dynamics and osmotic pressure in solutions.	Emil A. von Behring, for work on serum therapy against diphtheria.
Hendrik A. Lorentz and Pieter Zeeman, for work on influence of magnetism upon radiation.	Emil Fischer, for experiments in sugar and purin groups of substances.	Sir Ronald Ross, for work on malaria.
A. Henri Becquerel, work on discovery of spontaneous radioactivity.	Svante A. Arrhenius, for his electrolytic theory of dissociation.	Niels R. Finsen, for his treatment of lupus vulgaris, with concentrated light rays.
Pierre and Marie Curie; study of radiation.	Sir William Ramsay; discovery and determination of place of inert gaseous elements in air.	Ivan P. Pavlov, for work on the physiology of digestion.
John Strutt (Lord Rayleigh) for discovery of argon in investigating gas density.	Adolf von Baeyer, for work on organic dyes and hydroaromatic combinations.	Robert Koch, for work on tuberculosis.
Philipp Lenard, for work with cathode rays.	Henri Moissan, for isolation of fluorine, and introduction of electric furnace.	Camillo Golgi and Santiago Ramón y Cajal, for work on structure of the nervous system.
Joseph J. Thomson, for investigations on passage of electricity through gases.	Eduard Buchner; discovery of cell-less fermentation and investigations in biological chemistry.	Charles L. A. Laveran, for work with protozoa in the generation of disease.
Albert A. Michelson, for spectroscopic and meteorologic investigations.	Ernest Rutherford, for investigations into disintegration of elements and chemistry of radioactive substances.	Paul Ehrlich and Élie Metchnikoff, for work on immunity.
Gabriel Lippmann, for method of reproducing colors by photography.	Wilhelm Ostwald, for work on catalysis and investigations into chemical equilibrium and reaction rates.	Theodor Kocher, for work on the thyroid gland.
Guglielmo Marconi and Ferdinand Braun, for development of wireless.	Otto Wallach, for work in the field of alicyclic compounds.	Albrecht Kossel, for achievements in the chemistry of the cell.
Johannes D. van der Waals, for work with the equation of state for gases and liquids.	Marie Curie, for discovery of elements radium and polonium.	Allvar Gullstrand, for work on the dioptrics of the eye.
Wilhelm Wien, for his laws governing the radiation of heat.	Victor Grignard, for reagent discovered by and named after him.	Alexis Carrel, for work on vascular ligature and grafting of blood vessels and organs.
Gustaf Dalén, for discovery of automatic regulators used in lighting lighthouses and light buoys.	Paul Sabatier, for the methods of hydrogenating organic compounds.	

Year	Physics	Chemistry	Medicine
1913	H. Kamerlingh-Onnes, for work leading to production of liquid helium.	Alfred Werner, for linking up atoms within the molecule.	Charles Richet, for work on anaphylaxis.
1914	Max von Laue, for discovery of diffraction of Roentgen rays passing through crystals.	Theodore W. Richards, for determining atomic weight of many chemical elements.	Robert Bárány, for work on physiology and pathology of the vestibular system.
1915	W. H. Bragg and W. L. Bragg, for analysis of crystal structure by means of X rays.	Richard Willstätter, for research into coloring matter of plants, especially chlorophyll.	No award.
1917	Charles G. Barkla, discovery of Roentgen radiation of the elements.	No award.	No award.
1918	Max Planck, for discoveries in connection with quantum theory.	Fritz Haber, for synthetic production of ammonia.	No award.
1919	Johannes Stark, discovery of Doppler effect in Canal rays and decomposition of spectrum lines by electric fields.	No award.	Jules Bordet, for discoveries in connection with 'immunity.
1920	Charles E. Guillaume, for discoveries of anomalies in nickel steel alloys.	Walther Nernst, for work in thermochemistry.	August Krogh, discovery of regulation of capillaries' motor mechanism.
1921	Albert Einstein, for discovery of the law of the photoelectric effect.	Frederick Soddy, for investigations into origin and nature of isotopes.	No award.
1922	Niels Bohr, for investigations of structure of atoms and radiations emanating from them.	Francis W. Aston, for discovery of isotopes in nonradioactive elements and for discovery of the whole number rule.	In 1923 the 1922 prize was divided between Arnold V. Hill for discovery relating to production in muscles and Otto Meyerhof, for correlation between consumption of oxygen and production of lactic acid in muscles.
1923	Robert A. Millikan, work on elementary charge of electricity and photoelectric phenomena.	Fritz Pregl, for method of microanalysis of organic substances discovered by him.	Frederick G. Banting and John J. R. Macleod, discovery of insulin.
1924	Karl M. G. Siegbahn, for investigations in X-ray spectroscopy.	No award.	Willem Einthoven, for work covering the mechanism of the electrocardiogram.
1925	James Franck and Gustav Hertz, for discovery of laws governing impact of electrons upon atoms.	In 1926 the 1925 prize was awarded to Richard Zsigmondy, for work on the heterogeneous nature of colloid solutions.	No award.
1926	Jean B. Perrin, for works on discontinuous structure of matter and discovery of the equilibrium of sedimentation.	Theodor Svedberg, for work on disperse systems.	Johannes Fibiger, for discovery of the Spiro carcinoma.
1927	Arthur H. Compton, discovery of Compton phenomenon; and Charles T. R. Wilson, for method of perceiving paths taken by electrically charged particles.	In 1928 the 1927 prize was awarded to Heinrich Wieland, for investigations of bile acids and kindred substances.	Julius Wagner-Jauregg for use of malaria infection in treatment of dementia paralytica.

Physics

In 1929 the 1928 prize was awarded to Owen W. Richardson, for work on the phenomenon of thermionics and discovery of the Richardson Law.

Prince Louis Victor de Broglie, for discovery of the wave character of electrons.

Sir Chandrasekhara V. Raman, for work on diffusion of light and discovery of the Raman effect.

No award.

In 1933 the prize for 1932 was awarded to Werner Heisenberg, for creation of the quantum mechanics.

Erwin Schrödinger and Paul A. M. Dirac, for discovery of new fertile forms of the atomic theory.

No award.

James Chadwick, for discovery of the neutron.

Victor F. Hess, for discovery of cosmic radiation; and Carl D. Anderson, for discovery of the positron.

Clinton J. Davisson and George P. Thomson, for discovery of diffraction of electrons by crystals.

Enrico Fermi, for identification of new radioactivity elements and discovery of nuclear reactions effected by slow neutrons.

Ernest Orlando Lawrence, for the development of the cyclotron.

Chemistry

Adolf Windaus, for investigations on constitution of the sterols and their connection with vitamins.

Arthur Harden and Hans K. A. S. von Euler-Chelpin, for research of fermentation of sugars.

Hans Fischer, for work on coloring matter of blood and leaves and for his synthesis of hemin.

Karl Bosch and Friedrich Bergius, for invention and development of chemical high-pressure methods.

Irving Langmuir, for work in realm of surface chemistry.

No award.

Harold C. Urey, for discovery of heavy hydrogen.

Frédéric and Irène Joliot-Curie, for synthesis of new radioactive elements.

Peter J. W. Debye, for investigations on dipole moments and diffraction of X rays and electrons in gases.

Walter N. Haworth, for research on carbohydrates and vitamin C; and Paul Karrer, for work on carotenoids, flavins and vitamins A and B.

Richard Kuhn, for carotinoid study and vitamin research (declined the prize).

Adolf Friedrich Johann Butenandt, for work on sexual hormones (declined the prize); and Leopold Růžicka, work with polymethylenes.

Medicine

Charles Nicolle, for work on typhus exanthematicus.

Christiaan Eijkman, for discovery of the antineuritic vitamins; and Sir Frederick G. Hopkins, for discovery of growth-promoting vitamins.

Karl Landsteiner, for discovery of human blood groups.

Otto H. Warburg, for discovery of the character and mode of action of the respiratory ferment.

Sir Charles S. Sherrington and Edgar D. Adrian, for discoveries of the function of the neuron.

Thomas H. Morgan, for discoveries on hereditary function of the chromosomes.

George H. Whipple, George R. Minot, and William P. Murphy, for discovery of liver therapy against anemias.

Hans Spemann, for discovery of the organizer-effect in embryonic development.

Sir Henry H. Dale and Otto Loewi, for discoveries on chemical transmission of nerve impulses.

Albert Szent-Györgyi von Nagrapolt, for discoveries on biological combustion.

Cornelle Heymans, for importance of sinus and aorta mechanisms in the regulation of respiration.

Gerhard Domagk, antibacterial effect of prontosilate.

Year	Physics	Chemistry	Medicine
1943	Otto Stern, for detection of magnetic momentum of protons.	George Hevesy De Heves, for work on use of isotopes as indicators.	Henrik Dam, Edward Doisy for the analysis of Vitamin K.
1944	Isidor Isaac Rabi, for work on magnetic movements of atomic particles.	Otto Hahn, for work on atomic fission.	Joseph Erlanger and Albert Spencer Gasser, work on function of the nerve threads.
1945	Wolfgang Pauli, for work on atomic fissions.	Artturi Ilmari Virtanen, for research in the field of conservation of food.	Sir Alexander Fleming, Ernst Boris Chain, Sir Howard Florey, discovery of penicillin.
1946	Percy Williams Bridgman, studies and inventions in high-pressure physics.	James B. Sumner, crystallizing of enzymes. John H. Northrop and Wendell M. Stanley, preparing enzymes and virus proteins in pure form.	Herman J. Muller, hereditary effects of X rays on genes.
1947	Sir Edward Appleton, for discovery of layer which reflects radio short waves in the ionosphere.	Sir Robert Robinson, for research in plant substances.	Carl F. and Gerty T. for work on starch metabolism; Nardo A. Houssay, study of pituitary.
1948	Patrick M. S. Blackett, for improvement on Wilson chamber, discoveries in cosmic radiation.	Arne Tiselius, for biochemical discoveries and isolation of mouse paralysis virus.	Paul Mueller, for discovery of insect-killing properties of DDT.
1949	Hideki Yukawa, for mathematical prediction, 14 years ago, of the meson.	William Francis Glauque, for research in thermodynamics, especially effects of low temperature.	Walter Rudolf Hess, research on brain control of body; Antonio Caetano de Almeida Freire Egas Moniz, development of operation.
1950	Cecil Frank Powell, for method of photographic study of atom nucleus, and for discoveries about mesons.	Otto Diels and Kurt Alder for discovery of diene synthesis enabling scientists to study structure of organic matter.	Philip S. Hench, Edward C. Kendall, and T. Reichstein, for discoveries about hormones of adrenal cortex.
1951	Sir John Douglas Cockcroft and Ernest T. S. Walton, for work in 1932 on transmutation of atomic nuclei.	Glenn T. Seaborg and Edwin M. McMillan, for discovery of plutonium.	Max Theiler, for development of anti-yellow fever vaccine.
1952	Edward Mills Purcell and Felix Bloch, for work in measurement of magnetic fields in atomic nuclei.	Archer John Porter Martin and Richard Laurence Millington Synges, for development of partition chromatography.	Selman A. Waksman, co-discovery of streptomycin.
1953	Fritz Zernike, for development of "phase contrast" microscope.	Hermann Staudinger, for research in giant molecules.	Fritz A. Lipmann and Adolph Krebs, for study of living cells.
1954	Max Born, for work in quantum mechanics; and Walther Bothe, for work in cosmic radiation.	Linus Pauling, for study of forces holding together protein and other molecules.	John F. Enders, Thomas H. Weller and Fred C. Robbins, for work with cultivation of virus.
1955	Polykarp Kusch and Willis E. Lamb, for work in atomic measurement.	Vincent du Vigneaud, for work on pituitary hormones.	Hugo Theorell, for work on oxidation enzymes.
1956	William Shockley, Walter H. Brattain and John Bardeen for developing electronic transistor.	Cyril Hinshelwood and Nikolai N. Semenov for parallel research on chemical reaction kinetics.	Dickinson W. Richardson Jr., André F. Cournot and Werner Forssman for new technique for heart disease.

Physics

Tsung Dao Lee and Chen Ning Yang, for disproving principle of conservation of parity.
 Pavel A. Cherenkov, Ilya M. Frank, and Igor E. Tamm, for work resulting in development of cosmic-ray counter.

Emilio Segre and Owen Chamberlain, for demonstrating the existence of the anti-proton.

Chemistry

Sir Alexander Todd, for research with chemical compounds that are factors in heredity.
 Frederick Sanger, for determining molecular structure of insulin.

Jaroslav Heyrovsky, for development of polarography, an electrochemical method of analysis.

Medicine

Daniel Bovet, for development of drugs to relieve allergies and relax muscles during surgery.

Joshua Lederberg, for work with genetic mechanisms; George W. Beadle and Edward L. Tatum, for discovering how genes transmit hereditary characteristics.

Severo Ochoa and Arthur Kornberg, for discoveries related to compounds within chromosomes, which play a vital role in heredity.

(For 1960 Nobel prize winners, see Nobel prizes in index.)

Pulitzer Prize Awards

Source: Columbia University, New York. (For years not listed, no award was made.)

Pulitzer Prizes in Journalism

ious Public Service	1955 Columbus (Ga.) Ledger & Sunday Ledger-Enquirer	(Scripps-Howard Newspapers)
w York Times		1937 JOHN W. OWENS (Baltimore Sun)
waukee Journal		1938 W. W. WAYMACK (Des Moines Register & Tribune)
ston Post	1956 Watsonville (Calif.) Register-Pajaronian	1939 RONALD G. CALLVERT (Portland Oregonian)
w York World	1957 Chicago Daily News	1940 BART HOWARD (St. Louis Post-Dispatch)
mpphis Commercial Appeal	1958 (Little Rock) Arkansas Gazette	1941 REUBEN MAURY (New York Daily News)
w York World	1959 Utica (N. Y.) Observer Dispatch and the Utica Daily Press	1942 GEOFFREY PARSONS (New York Herald Tribune)
umbus (Ga.) Enquirer Sun	1960 Los Angeles Times	1943 FORREST W. SEYMOUR (Des Moines Register & Tribune)
nton (Ohio) Daily News	Editorial	1944 Kansas City (Mo.) Star (HENRY J. HASKELL)
ianapolis Times	1917 New York Tribune	1945 GEORGE W. POTTER (Providence [R. I.] Journal-Bulletin)
w York Evening World	1918 Louisville Courier-Journal	1946 HODDING CARTER ([Green-ville, Miss.] Delta Democrat-Times)
anta Constitution	1920 HARVEY E. NEWBRANCH (Omaha Evening World-Herald)	1947 WILLIAM H. GRIMES (Wall Street Journal)
ianapolis News	1922 FRANK M. O'BRIEN (New York Herald)	1948 VIRGINIUS DABNEY (Richmond Times-Dispatch)
w York World-Telegram	1923 WILLIAM ALLEN WHITE (Emporia [Kans.] Gazette)	1949 JOHN H. CRIDER (Boston Herald); HERBERT ELLISTON (Washington Post)
dford (Oreg.) Mail Tribune	1924 Boston Herald; Special prize: FRANK I. COBB (New York World)	1950 CARL M. SAUNDERS (Jackson [Mich.] Citizen Patriot)
ramento Bee	1925 Charleston (S. C.) News and Courier	1951 WILLIAM H. FITZPATRICK (New Orleans States)
lar Rapids (Iowa) Gazette	1926 New York Times (EDWARD M. KINGSBURY)	1952 LOUIS LACOSS (St. Louis Globe-Democrat)
Louis Post-Dispatch	1927 Boston Herald (F. LAURISTON BULLARD)	1953 VERMONT C. ROYSTER (Wall Street Journal)
marck (N. Dak.) Tribune	1928 GROVER CLEVELAND HALL (Montgomery [Ala.] Advertiser)	1954 Boston Herald (DON MURRAY)
mi Daily News	1929 LOUIS ISAAC JAFFE (Norfolk Virginian-Pilot)	1955 Detroit Free Press (ROYCE HOWES)
terbury (Conn.) Republican & American	1931 CHARLES S. RYCKMAN (Fremont [Nebr.] Tribune)	1956 LAUREN K. SOTH (Des Moines Register & Tribune)
Louis Post-Dispatch	1933 Kansas City (Mo.) Star	
Los Angeles Times	1934 E. P. CHASE (Atlantic [Iowa] News Telegraph)	
aha World-Herald	1936 FELIX MORLEY (Washington [D.C.] Post); GEORGE B. PARKER	
w York Times		
roit Free Press		
anton (Pa.) Times		
ttimore Sun		
Louis Post-Dispatch		
ncoln) Nebraska State Journal		
icago Daily News; St. Louis Post-Dispatch		
mi Herald; Brooklyn Eagle		
Louis Post-Dispatch		
iteville (N. C.) News Reporter; Tabor City (N. C.) Tribune		
arden City, L. I.) Newsday		

- 1957 BUFORD BOONE (*Tuscaloosa [Ala.] News*)
- 1958 HARRY S. ASHMORE (*Arkansas Gazette*)
- 1959 RALPH MCGILL (*Atlanta Constitution*)
- 1960 LENOIR CHAMBERS (*Virginian-Pilot*)
- Correspondence**
- 1929 PAUL SCOTT MOWRER (*Chicago Daily News*)
- 1930 LELAND STOWE (*New York Herald Tribune*)
- 1931 H. R. KNICKERBOCKER (*Philadelphia Public Ledger and New York Evening Post*)
- 1932 WALTER DURANTY (*New York Times*); CHARLES G. ROSS (*St. Louis Post-Dispatch*)
- 1933 EDGAR ANSEL MOWRER (*Chicago Daily News*)
- 1934 FREDERICK T. BIRCHALL (*New York Times*)
- 1935 ARTHUR KROCK (*New York Times*)
- 1936 WILFRED C. BARBER (*Chicago Tribune*)
- 1937 ANNE O'HARE MCCORMICK (*New York Times*)
- 1938 ARTHUR KROCK (*New York Times*)
- 1939 LOUIS P. LOCHNER (*Associated Press*)
- 1940 OTTO D. TOLISCHUS (*New York Times*)
- 1941 Group award*
- 1942 CARLOS P. ROMULO (*Philippines Herald*)
- 1943 HANSON W. BALDWIN (*New York Times*)
- 1944 ERNIE FYLE (*Scripps-Howard Newspaper Alliance*)
- 1945 HAROLD V. (HAL) BOYLE (*Associated Press*)
- 1946 ARNALDO CORTESI (*New York Times*)
- 1947 BROOKS ATKINSON (*New York Times*)
- 1948 Discontinued
- Cartoon**
- 1922 ROLLIN KIRBY (*New York World*)
- 1924 JAY NORWOOD DARLING (*New York Tribune*)
- 1925 ROLLIN KIRBY (*New York World*)
- 1926 D. R. FITZPATRICK (*St. Louis Post-Dispatch*)
- 1927 NELSON HARDING (*Brooklyn Eagle*)
- 1928 NELSON HARDING (*Brooklyn Eagle*)
- 1929 ROLLIN KIRBY (*New York World*)
- 1930 CHARLES R. MACAULEY (*Brooklyn Eagle*)
- 1931 EDMUND DUFFY (*Baltimore Sun*)
- 1932 JOHN T. MCCUTCHEON (*Chicago Tribune*)
- 1933 H. M. TALBUT (*Washington Daily News*)
- 1934 EDMUND DUFFY (*Baltimore Sun*)
- 1935 ROSS A. LEWIS (*Milwaukee Journal*)
- 1937 C. D. BATCHELOR (*New York Daily News*)
- 1938 VAUGHN SHOEMAKER (*Chicago Daily News*)
- 1939 CHARLES G. WERNER (*Daily Oklahoman [Oklahoma City]*)
- 1940 EDMUND DUFFY (*Baltimore Sun*)
- 1941 JACOB BURCK (*Chicago Times*)
- 1942 HERBERT L. BLOCK (*NEA Service*)
- 1943 JAY NORWOOD DARLING (*New York Herald Tribune*)
- 1944 CLIFFORD K. BERRYMAN (*Washington [D. C.] Evening Star*)
- 1945 BILL MAULDIN (*United Features Syndicate*)
- 1946 BRUCE ALEXANDER RUSSELL (*Los Angeles Times*)
- 1947 VAUGHN SHOEMAKER (*Chicago Daily News*)
- 1948 REUBEN L. GOLDBERG (*New York Sun*)
- 1949 LUTE PEASE (*Newark Evening News*)
- 1950 JAMES T. BERRYMAN (*Washington [D. C.] Evening Star*)
- 1951 REG (REGINALD W.) MANNING (*Arizona Republic [Phoenix]*)
- 1952 FRED L. PACKER (*New York Mirror*)
- 1953 EDWARD D. KUEKES (*Cleveland Plain Dealer*)
- 1954 HERBERT L. BLOCK (*Washington [D. C.] Post & Times-Herald*)
- 1955 DANIEL R. FITZPATRICK (*St. Louis Post-Dispatch*)
- 1956 ROBERT YORK (*Louisville Times*)
- 1957 TOM LITTLE (*Nashville Tennessean*)
- 1958 BRUCE M. SHANKS (*Buffalo Evening News*)
- 1959 BILL MAULDIN (*St. Louis Post-Dispatch*)
- News Photography**
- 1942 MILTON BROOKS (*Detroit News*)
- 1943 FRANK NOEL (*Associated Press*)
- 1944 FRANK FILAN (*Associated Press*); EARLE L. BUNKER (*Omaha World-Herald*)
- 1945 JOE ROSENTHAL (*Associated Press*)
- 1947 ARNOLD HARDY
- 1948 FRANK CUSHING (*Bozeman Traveler*)
- 1949 NAT FEIN (*New Herald Tribune*)
- 1950 BILL CROUCH (*Oakland Tribune*)
- 1951 MAX DESFOR (*Associated Press*)
- 1952 JOHN ROBINSON & ULTANG (*Des Moines Register & Tribune*)
- 1953 WILLIAM M. GALLAGHER (*Flint [Mich.] Journal*)
- 1954 MRS. WALTER M. SCHLESINGER
- 1955 JOHN L. GAUNT, JR. (*Los Angeles Times*)
- 1956 New York Daily News
- 1957 HARRY A. TRASK (*Bozeman Traveler*)
- 1958 WILLIAM C. BEALL (*Washington Daily News*)
- 1959 WILLIAM SEAMAN (*Milwaukee Star*)
- 1960 ANDREW LOPEZ (*United Press International*)
- National Telegraphic Reporter**
- 1942 LOUIS STARK (*New York Times*)
- 1944 DEWEY L. FLEMING (*Baltimore Sun*)
- 1945 JAMES B. RESTON (*New York Times*)
- 1946 EDWARD A. HARRIS (*Louis Post-Dispatch*)
- 1947 EDWARD T. FOLGER (*Washington [D. C.] Post*)
- National Reporting**
- 1948 BERT ANDREWS (*New York Herald Tribune*); S. FINNEY (*Minneapolis Tribune*)
- 1949 C. P. TRUSSELL (*New York Times*)
- 1950 EDWIN O. GUTHMAN (*Seattle Times*)
- 1952 ANTHONY LEVIERO (*New York Times*)
- 1953 DON WHITEHEAD (*Associated Press*)
- 1954 RICHARD WILSON (*Chicago Newspapers*)
- 1955 ANTHONY LEWIS (*Washington Daily News*)
- 1956 CHARLES L. BARRETT (*Chattanooga Times*)
- 1957 JAMES RESTON (*New York Times*)
- 1958 REILMAN MORIN (*Associated Press*)
- CLARK MOLLENHOF (*Moines Register & Tribune*)
- 1959 HOWARD VAN SMITH (*San Francisco News*)
- 1960 VANCE TRIMBLE (*Seattle Times*)
- HOWARD NEWSPAPER ALLIANCE

*For the public services and the individual achievements of American news reporters in the war zones.

National Telegraphic Reporting

JERENCE EDMUND ALLEN (Associated Press)
WOLFERT (North American Newspaper Alliance, Inc.)
NIEL DE LUCE (Associated Press)
RK S. WATSON (Baltimore Sun)
MER W. BIGART (New York Herald Tribune)
Y GILMORE (Associated Press)

National Reporting

UL W. WARD (Baltimore Sun)
CE DAY (Baltimore Sun)
MUND STEVENS (Christian Science Monitor)
ES BEECH & FRED PARKS (Chicago Daily News); HOMER BIGART & MARGUERITE HIGGINS (New York Herald Tribune); RELMAN MORIN & DON WHITEHEAD (Associated Press)
IN M. HIGHTOWER (Associated Press)
STIN C. WEHRWEIN (Milwaukee Journal)
G. LUCAS (Scripps-Howard Newspapers)
ERSON E. SALISBURY (New York Times)
LIAM RANDOLPH HEARST, R., & FRANK CONNIFF (Hearst newspapers) & INGSBURY SMITH (INS)
SSELL JONES (United Press)
o York Times
EPH MARTIN & PHILIP ANTORA (New York Daily News)
M. ROSENTHAL (New York Times)

Reporting

BERT B. SWOPE (New York World)
OLD A. LITTLEDAL (New York Evening Post)
N J. LEARY, JR. (New York World)
IS SEIBOLD (New York World)
KE L. SIMPSON (Associated Press)
A JOHNSTON (New York Times)
NER WHITE (San Diego Sun)
ES W. MULROY & VIN H. GOLDSTEIN (Chicago Daily News)

1926 WILLIAM BURKE MILLER (Louisville Courier-Journal)
1927 JOHN T. ROGERS (St. Louis Post-Dispatch)
1929 PAUL Y. ANDERSON (St. Louis Post-Dispatch)
1930 RUSSELL D. OWEN (New York Times); Special award: W. O. DAPPING (Auburn [N. Y.] Citizen)
1931 A. B. MACDONALD (Kansas City [Mo.] Star)
1932 W. C. RICHARDS, D. D. MARTIN, J. S. POOLER, F. D. WEBB, J. N. W. SLOAN (all of Detroit Free Press)
1933 FRANCIS A. JAMIESON (Associated Press)
1934 ROYCE BRIER (San Francisco Chronicle)
1935 WILLIAM H. TAYLOR (New York Herald Tribune)
1936 LAUREN D. LYMAN (New York Times)
1937 JOHN J. O'NEILL (New York Herald Tribune), WILLIAM LEONARD LAURENCE (New York Times), HOWARD W. BLAKESLEE (Associated Press), GOBIND BEHARILAL (Universal Service), DAVID DIETZ (Scripps-Howard Newspapers)
1938 RAYMOND SPRIGLE (Pittsburgh Post-Gazette)
1939 THOMAS L. STOKES (New York World-Telegram)
1940 S. BURTON HEATH (New York World-Telegram)
1941 WESTBROOK PEGLER (New York World-Telegram)
1942 STANTON DELAPLANE (San Francisco Chronicle)
1943 GEORGE WELLER (Chicago Daily News)
1944 PAUL SCHOENSTEIN & associates (New York Journal-American)
1945 JACK S. MCDOWELL (San Francisco Call-Bulletin)
1946 WILLIAM LEONARD LAURENCE (New York Times)
1947 FREDERICK WOLTMAN (New York World-Telegram)
1948 GEORGE E. GOODWIN (Atlanta Journal)
1949 MALCOLM JOHNSON (New York Sun)
1950 MEYER BERGER (New York Times)
1951 EDWARD S. MONTGOMERY (San Francisco Examiner)
1952 GEORGE DE CARVALHO (San Francisco Chronicle)

1953 Editorial staff (Providence Journal & Evening Bulletin);* EDWARD J. MOWERY (New York World-Telegram & Sun)†
1954 Vicksburg (Miss.) Sunday Post-Herald;* ALVIN SCOTT MCCOY (Kansas City [Mo.] Star)†
1955 MRS. CARO BROWN (Alice [Tex.] Daily Echo);* ROLAND KENNETH TOWERY (Cuero [Tex.] Record)†
1956 LEE HILLS (Detroit Free Press);* ARTHUR DALEY (New York Times)†
1957 Salt Lake Tribune;* WALLACE TURNER and WILLIAM LAMBERT (Portland Oregonian)†
1958 FARGO [N. Dak.] Forum;* GEORGE BEVERIDGE (Washington Evening Star)†
1959 MARY LOU WERNER (Washington Evening Star);* JOHN HAROLD BRISLIN (Scranton [Pa.] Tribune & Scrantonian)†
1960 JACK NELSON (Atlanta Constitution);* MIRIAM OTTENBERG (Washington Evening Star)†

Special Citations

1938 Edmonton [Alberta] Journal, special bronze plaque for editorial leadership in defense of freedom of press in Province of Alberta.
1941 New York Times for the public educational value of its foreign news report.
1944 BYRON PRICE, Director of the Office of Censorship, for the creation and administration of the newspaper and radio codes. MRS. WILLIAM ALLEN WHITE, for her husband's interest and services during the past seven years as a member of the Advisory Board of the Graduate School of Journalism, Columbia University.
1945 The cartographers of the American press for their war maps.
1947 (Pulitzer centennial year.) Columbia University and the Graduate School of Journalism, for their efforts to

* Reporting under pressure of edition deadlines. † Reporting not under pressure of edition deadlines.

maintain and advance the high standards governing the Pulitzer Prize awards. The *St. Louis Post-Dispatch*, for its unswerving adherence to the public and professional ideals of its founder and its leadership in the field of American journalism.

- 1948 DR. FRANK D. FACKENTHAL, for his interest and service.

1951 CYRUS L. SULZBERGER (*New York Times*) for his exclusive interview with Archbishop Stepinac in a Yugoslav prison.

1952 *Kansas City Star* for coverage of 1951 floods; MAX KASE (*New York Journal-American*) for exposures of bribery in college basketball.

1953 *New York Times* for its 17-year publication of "News of the Week in Review."

1958 WALTER LIPPMANN (*New York Herald Tribune*) for his "wisdom, ception and high sense of responsibility" in his commentary on national and international affairs.

1960 GARRETT MATTINGLY, *The Armada*.

History of Services Rendered to the Public by American Presidents Preceding Year

1918 MINNA LEWINSON, *The Armada*. B. HOUGH

Pulitzer Prizes in Letters

Novel*

- 1918 *His Family*. By ERNEST POOLE
1919 *The Magnificent Ambersons*. By BOOTH TARKINGTON
1921 *The Age of Innocence*. By EDITH WHARTON
1922 *Alice Adams*. By BOOTH TARKINGTON
1923 *One of Ours*. By WILLA CATHER
1924 *The Able McLaughlins*. By MARGARET WILSON
1925 *So Big*. By EDNA FERBER
1926 *Arrowsmith*. By SINCLAIR LEWIS
1927 *Early Autumn*. By LOUIS BROMFIELD
1928 *The Bridge of San Luis Rey*. By THORNTON WILDER
1929 *Scarlet Sister Mary*. By JULIA PETERKIN
1930 *Laughing Boy*. By OLIVER LA FARGE
1931 *Years of Grace*. By MARGARET AYER BARNES
1932 *The Good Earth*. By PEARL S. BUCK
1933 *The Store*. By T. S. STRIBLING
1934 *Lamb in His Bosom*. By CAROLINE MILLER
1935 *Now in November*. By JOSEPHINE WINSLOW JOHNSON
1936 *Honey in the Horn*. By HAROLD L. DAVIS
1937 *Gone With the Wind*. By MARGARET MITCHELL
1938 *The Late George Apley*. By JOHN PHILLIPS MARQUAND
1939 *The Yearling*. By MARJORIE KINNAN RAWLINGS
1940 *The Grapes of Wrath*. By JOHN STEINBECK
1942 *In This Our Life*. By ELLEN GLASGOW

- 1943 *Dragon's Teeth*. By Upton SINCLAIR
1944 *Journey in the Dark*. By MARTIN FLAVIN
1945 *A Bell for Adano*. By JOHN HERSEY
1947 *All the King's Men*. By ROBERT PENN WARREN
1948 *Tales of the South Pacific*. By JAMES A. MICHENER
1949 *Guard of Honor*. By JAMES GOULD COZZENS
1950 *The Way West*. By A. B. GUTHRIE, JR.
1951 *The Town*. By CONRAD RICHTER
1952 *The Caine Mutiny*. By HERMAN WOUK
1953 *The Old Man and the Sea*. By ERNEST HEMINGWAY
1955 *A Fable*. By WILLIAM FAULKNER
1956 *Andersonville*. By MAC-KINLAY KANTOR
1958 *A Death in the Family*. By JAMES AGEE
1959 *The Travels of Jaimie McPheeters*. By ROBERT LEWIS TAYLOR
1960 *Advise and Consent*. By ALLEN DRURY

Drama

- 1918 *Why Marry?* By JESSE LYNCH WILLIAMS
1920 *Beyond the Horizon*. By EUGENE O'NEILL
1921 *Miss Lulu Bett*. By ZONA GALE
1922 *Anna Christie*. By EUGENE O'NEILL
1923 *Icebound*. By OWEN DAVIS
1924 *Hell-Bent For Heaven*. By HATCHER HUGHES
1925 *They Knew What They Wanted*. By SIDNEY HOWARD
1926 *Craig's Wife*. By GEORGE KELLY
1927 *In Abraham's Bosom*. By PAUL GREEN

- 1928 *Strange Interlude*. By EUGENE O'NEILL
1929 *Street Scene*. By L. RICE
1930 *The Green Pastures*. By MARC CONNELLY
1931 *Altson's House*. By S. GLASPELL
1932 *Of Thee I Sing*. By GEORGE S. KAUFMAN
1933 *Both Your Houses*. By MAXWELL ANDERSON
1934 *Men in White*. By S. KINGSLEY
1935 *The Old Maid*. By AKINS
1936 *Idiot's Delight*. By E. SHERWOOD
1937 *You Can't Take It With You*. By GEORGE S. KAUFMAN
1938 *Our Town*. By THORNTON WILDER
1939 *Abe Lincoln in Illinois*. By ROBERT E. SHERMAN
1940 *The Time of Your Life*. By WILLIAM SAROYAN
1941 *There Shall Be No Night*. By ROBERT E. SHERMAN
1943 *The Skin of Our Lion*. By THORNTON WILDER
1945 *Harvey*. By MARY CROUSE
1946 *State of the Union*. By RUSSEL CROUSE
1948 *A Streetcar Named Desire*. By TENNESSEE LAMM
1949 *Death of a Salesman*. By ARTHUR MILLER
1950 *South Pacific*. By J. ARD RODGERS
1952 *The Shrike*. By J. HAMMERSTEIN 2ND
1953 *Picnic*. By WILLIAM JOSHUA LOGAN
1954 *The Teahouse of the August Moon*. By PATRICK KRAMM

*Category changed to fiction for 1948 and thereafter.

- on a Hot Tin Roof.* By TENNESSEE WILLIAMS
Diary of Anne Frank. By FRANCES GOODRICH & ALBERT HACKETT
ing Day's Journey Into Night. By EUGENE O'NEILL
ok Homeward, Angel. By KETTI FRINGS
g. By ARCHIBALD MACLEISH
orello. By George Abbott, Jerome Weidman, Jerry Bock and Sheldon Harnick
- History**
th Americans of Past and Present Days. By F. J. JUSSERAND, Amb. of France to U. S.
History of the Civil War, 1861-1865. By JAMES FORD RHODES
War with Mexico. By JUSTIN H. SMITH
Victory at Sea. By WILLIAM SOWDEN SIMS in collaboration with BURTON J. HENDRICK
Founding of New England. By JAMES CRUSLOW ADAMS
Supreme Court in United States History. By CHARLES WARREN
the American Revolution—A Constitutional Interpretation. By CHARLES HOWARD MCLEWAIN
History of the American Frontier. By FREDERIC L. PAXSON
History of the United States. By EDWARD HANNING
ckney's Treaty. By SAMUEL FLAGG BEMIS
Currents in American Thought. By VERNON LOUIS PARRINGTON
Organization and Administration of the Union Army, 1861-1865. By FRED ALBERT SHANNON
War of Independence. By CLAUDE H. VAN DYKE
Coming of the War: 1914. By BERNADOTTE E. SCHMITT
Experiences in the World War. By JOHN J. PERSHING
Significance of Sections in American History. By FREDERICK J. TURNER
- 1934 *The People's Choice.* By HERBERT AGAR
 1935 *The Colonial Period of American History.* By CHARLES MCLEAN ANDREWS
 1936 *The Constitutional History of the United States.* By ANDREW C. McLAUGHLIN
 1937 *The Flowering of New England.* By VAN WYCK BROOKS
 1938 *The Road to Reunion, 1865-1900.* By PAUL HERMAN BUCK
 1939 *A History of American Magazines.* By FRANK LUTHER MOTT
 1940 *Abraham Lincoln: The War Years.* By CARL SANDBURG
 1941 *The Atlantic Migration, 1607-1860.* By MARCUS LEE HANSEN
 1942 *Reveille in Washington.* By MARGARET LEECH
 1943 *Paul Revere and the World He Lived In.* By ESTHER FORBES
 1944 *The Growth of American Thought.* By MERLE CURTI
 1945 *Unfinished Business.* By STEPHEN BONSAI
 1946 *The Age of Jackson.* By ARTHUR M. SCHLESINGER, JR.
 1947 *Scientists Against Time.* By JAMES PHINNEY BAXTER, 3RD
 1948 *Across the Wide Missouri.* By BERNARD DEVOTO
 1949 *The Disruption of American Democracy.* By ROY FRANKLIN NICHOLS
 1950 *Art and Life in America.* By OLIVER W. LARKIN
 1951 *The Old Northwest, Pioneer Period 1815-1840.* By R. CARLYLE BULEY
 1952 *The Uprooted.* By OSCAR HANDLIN
 1953 *The Era of Good Feelings.* By GEORGE DAN-GERFIELD
 1954 *A Stillness at Appomattox.* By BRUCE CATTON
 1955 *Great River: The Rio Grande in North American History.* By PAUL HORGAN
 1956 *The Age of Reform.* By RICHARD HOFSTADTER
 1957 *Russia Leaves the War: Soviet-American Relations, 1917-1920.* By GEORGE F. KENNAN
 1958 *Banks and Politics in America: From the*
- Revolution to the Civil War.* By BRAY HAMMOND
 1959 *The Republican Era: 1869-1901.* By LEONARD D. WHITE, assisted by JEAN SCHNEIDER.
 1960 *In the Days of McKinley.* By Margaret Leech
- Biography or Autobiography**
 1917 *Julia Ward Howe.* By LAURA E. RICHARDS and MAUDE HOWE ELLIOTT assisted by FLORENCE HOWE HALL
 1918 *Benjamin Franklin, Self-Revealed.* By WILLIAM CABELL BRUCE
 1919 *The Education of Henry Adams.* By HENRY ADAMS
 1920 *The Life of John Marshall.* By ALBERT J. BEVERIDGE
 1921 *The Americanization of Edward Bok.* By EDWARD BOK
 1922 *A Daughter of the Middle Border.* By HAMLIN GARLAND
 1923 *The Life and Letters of Walter H. Page.* By BURTON J. HENDRICK
 1924 *From Immigrant to Inventor.* By MICHAEL IDVORSKY PUPIN
 1925 *Barrett Wendell and His Letters.* By M. A. DEWOLFE HOWE
 1926 *The Life of Sir William Osler.* By HARVEY CUSHING
 1927 *Whitman.* By EMORY HOLLOWAY
 1928 *The American Orchestra and Theodore Thomas.* By CHARLES EDWARD RUSSELL
 1929 *The Training of an American. The Earlier Life and Letters of Walter H. Page.* By BURTON J. HENDRICK
 1930 *The Raven.* By MARQUIS JAMES
 1931 *Charles W. Eliot.* By HENRY JAMES
 1932 *Theodore Roosevelt.* By HENRY F. PRINGLE
 1933 *Grover Cleveland.* By ALLAN NEVINS
 1934 *John Hay.* By TYLER DENNETT
 1935 *R. E. Lee.* By DOUGLAS S. FREEMAN
 1936 *The Thought and Character of William James.* By RALPH BARTON PERRY
 1937 *Hamilton Fish.* By ALLAN NEVINS
 1938 *Pedlar's Progress.* By

- ODELL SHEPARD. *Andrew Jackson*. By MARQUIS JAMES
- 1939 *Benjamin Franklin*. By CARL VAN DOREN
- 1940 *Woodrow Wilson. Life and Letters*, Vols. VII and VIII. By RAY STANNARD BAKER
- 1941 *Jonathan Edwards*. By OLA E. WINSLOW
- 1942 *Crusader in Crinoline*. By FORREST WILSON
- 1943 *Admiral of the Ocean Sea*. By SAMUEL ELIOT MORISON
- 1944 *The American Leonardo: The Life of Samuel F. B. Morse*. By CARLETON MABEE
- 1945 *George Bancroft: Brahmin Rebel*. By RUSSEL BLAINE NYE
- 1946 *Son of the Wilderness*. By LINNIE MARSH WOLFE
- 1947 *The Autobiography of William Allen White*
- 1948 *Forgotten First Citizen: John Bigelow*. By MARGARET CLAPP
- 1949 *Roosevelt and Hopkins*. By ROBERT E. SHERWOOD
- 1950 *John Quincy Adams and the Foundations of American Foreign Policy*. By SAMUEL FLAGG BEMIS
- 1951 *John C. Calhoun: American Portrait*. By MARGARET LOUISE COIT
- 1952 *Charles Evans Hughes*. By MERLO J. PUSEY
- 1953 *Edmund Pendleton 1721-1803*. By DAVID J. MAYS
- 1954 *The Spirit of St. Louis*. By CHARLES A. LINDBERGH
- 1955 *The Taft Story*. By WILLIAM S. WHITE
- 1956 *Benjamin Henry Latrobe*. By TALBOT F. HAMLIN
- 1957 *Profiles in Courage*. By JOHN F. KENNEDY
- 1958 *George Washington*. By DOUGLAS SOUTHALL FREEMAN (Vols. 1-6) and JOHN ALEXANDER CARROLL and MARY WELLS ASHWORTH (Vol. 7)
- 1959 *Woodrow Wilson, American Prophet*. By ARTHUR WALWORTH
- 1960 *John Paul Jones*. By SAMUEL ELIOT MORISON
- Poetry
- 1918 *Love Songs*. By SARA TEASDALE
- 1919 *Old Road to Paradise*. By MARGARET WIDDEMER
- Corn Huskers*. By CARL SANDBURG
- 1922 *Collected Poems*. By EDWIN ARLINGTON ROBINSON
- 1923 *The Ballad of the Harp-Weaver; A Few Figs from Thistles*; eight sonnets in *American Poetry*, 1922, *A Miscellany*. By EDNA ST. VINCENT MILLAY
- 1924 *New Hampshire: A Poem with Notes and Grace Notes*. By ROBERT FROST
- 1925 *The Man Who Died Twice*. By EDWIN ARLINGTON ROBINSON
- 1926 *What's O'Clock*. By AMY LOWELL
- 1927 *Fiddler's Farewell*. By LEONORA SPEYER
- 1928 *Tristram*. By EDWIN ARLINGTON ROBINSON
- 1929 *John Brown's Body*. By STEPHEN VINCENT BENÉT
- 1930 *Selected Poems*. By CONRAD AIKEN
- 1931 *Collected Poems*. By ROBERT FROST
- 1932 *The Flowering Stone*. By GEORGE DILLON
- 1933 *Conquistador*. By ARCHIBALD MACLEISH
- 1934 *Collected Verse*. By ROBERT HILLYER
- 1935 *Bright Ambush*. By AUDREY WURDEMAN
- 1936 *Strange Holiness*. By ROBERT P. T. COFFIN
- 1937 *A Further Range*. By ROBERT FROST
- 1938 *Cold Morning Sky*. By MARYA ZATURENSKA
- 1939 *Selected Poems*. By JOHN GOULD FLETCHER
- 1940 *Collected Poems*. By MARK VAN DOREN
- 1941 *Sunderland Capture*. By LEONARD BACON
- 1942 *The Dust Which Is*. By WILLIAM ROSE NÉT
- 1943 *A Witness Tree*. By ROBERT FROST
- 1944 *Western Star*. By PHEN VINCENT BENÉT
- 1945 *V-Letter and Other Poems*. By KARL SHANLEY
- 1947 *Lord Weary's Castle*. By ROBERT LOWELL
- 1948 *The Age of Anxiety*. By W. H. AUDEN
- 1949 *Terror and Decorum*. By PETER VIERECK
- 1950 *Annie Allen*. By GWYNETH DOLYN BROOKS
- 1951 *Complete Poems*. By CARL SANDBURG
- 1952 *Collected Poems*. By J. RIANNE MOORE
- 1953 *Collected Poems 1919-1952*. By ARCHIBALD MACLEISH
- 1954 *The Waking*. By THOMAS DORE ROETHKE
- 1955 *Collected Poems*. By WALLACE STEVENS
- 1956 *Poems—North & South*. By ELIZABETH BISHOP
- 1957 *Things of This World*. By RICHARD WILBUR
- 1958 *Promises: Poems 1919-1956*. By ROBERT PIERCE WARREN
- 1959 *Selected Poems, 1928-1959*. By STANLEY KUNITZ
- 1960 *Heart's Needle*. By WILLIAM SHODGRASS

Special Citations

- 1944 *Oklahoma!* By RICHARD RODGERS and O. HAMMERSTEIN 2ND
- 1957 KENNETH ROBERTS, for historical novels.

Pulitzer Prizes in Music

- 1943 *Secular Cantata No. 2, A Free Song*. By WILLIAM SCHUMAN
- 1944 *Symphony No. 4 (Op. 34)*. By HOWARD HANSON
- 1945 *Appalachian Spring*. By AARON COPLAND
- 1946 *The Cantic of the Sun*. By LEO SOWERBY
- 1947 *Symphony No. 3*. By CHARLES IVES
- 1948 *Symphony No. 3*. By WALTER PISTON
- 1949 *Louisiana Story* music. By VIRGIL THOMSON
- 1950 *The Consul*. By GIAN-CARLO MENOTTI
- 1951 *Music for opera Giants in the Earth*. By DOUGLAS STUART MOORE
- 1952 *Symphony Concertante*. By GAIL KUBIK
- 1954 *Concerto for Two Pianos and Orchestra*. By QUINCY PORTER
- 1955 *The Saint of Bleecker Street*. By GIAN-CARLO MENOTTI
- 1956 *Symphony No. 3*. By ERNST TOCH
- 1957 *Meditations on Ecclesiastes*. By NORRIS DELLO JOIO
- 1958 *Vanessa*. By SAMUEL BARBER
- 1959 *Concerto for Piano and Orchestra*. By JOHN MONTAINE
- 1960 *Second String Quartet*. By ELLIOTT CARTER

The Hall of Fame for Great Americans

Hall of Fame for Great Americans, established in 1900 on the campus of New York University, is an open-air hall with busts and tablets for 85 of the 86 persons so far honored for national achievements. New names are added on every five years by a College of Electors of about 100 eminent men and women from all the states. To be elected to the Hall of Fame, an individual must have been dead more than 25 years (before 1922, the stipulation was 10 years), must have been a citizen of the U. S., and must receive a majority vote. Nominations may be made by any citizen. For results of 1960 election see Index under Hall of Fame.

	Elected	Names	Elected
Adams (statesman)	1900	James Kent (jurist)	1900
Quincy Adams (statesman)	1905	Sidney Lanier (poet)	1945
Agassiz (naturalist)	1915	Robert E. Lee (military officer)	1900
B. Anthony (reformer)	1950	Abraham Lincoln (statesman)	1900
James Audubon (naturalist)	1900	Henry W. Longfellow (poet)	1900
Bancroft (historian)	1910	James Russell Lowell (poet)	1905
Ward Beecher (clergyman)	1900	Mary Lyon (educator)	1905
Alexander Graham Bell (inventor)	1950	James Madison (statesman)	1905
Boone (explorer)	1915	Horace Mann (educator)	1900
Booth (actor)	1925	John Marshall (jurist)	1900
Brooks (clergyman)	1910	Matthew F. Maury (oceanographer)	1930
Cullen Bryant (poet)	1910	Maria Mitchell (astronomer)	1905
Ellery Channing (clergyman)	1900	James Monroe (statesman)	1930
Choate (lawyer)	1915	Samuel F. B. Morse (inventor)	1900
Clay (statesman)	1900	William T. G. Morton (dentist)	1920
L. Clemens (author)	1920	John Lothrop Motley (historian)	1910
Cleveland (statesman)	1935	Simon Newcomb (astronomer)	1935
Fenimore Cooper (author)	1910	Thomas Paine (author)	1945
Cooper (philanthropist)	1900	Alice Freeman Palmer (educator)	1920
F. S. Cushman (actress)	1915	Francis Parkman (historian)	1915
Buchanan Eads (engineer)	1920	George Peabody (philanthropist)	1900
Edwards (clergyman)	1900	William Penn (colonizer)	1935
Waldo Emerson (author)	1900	Edgar Allan Poe (author)	1910
G. Farragut (naval officer)	1900	Walter Reed (surgeon)	1945
C. Foster (song composer)	1940	Theodore Roosevelt (statesman)	1950
Franklin (statesman)	1900	Augustus Saint-Gaudens (sculptor)	1920
Fulton (inventor)	1900	William T. Sherman (army officer)	1905
Willard Gibbs (physicist)	1950	Joseph Story (jurist)	1900
Crawford Gorgas (physician)	1950	Harriet Beecher Stowe (author)	1910
S. Grant (statesman)	1900	Gilbert Charles Stuart (painter)	1900
Hay (botanist)	1900	Booker T. Washington (educator)	1945
Her Hamilton (statesman)	1915	George Washington (statesman)	1900
Leah Hawthorne (author)	1900	Daniel Webster (statesman)	1900
Henry (physicist)	1915	George Westinghouse (inventor)	1955
Henry (statesman)	1920	J. A. McNeill Whistler (painter)	1930
Wendell Holmes (author)	1910	Walt Whitman (poet)	1930
Hopkins (educator)	1915	Elm Whitney (inventor)	1900
Howe (inventor)	1915	John Greenleaf Whittier (poet)	1905
Wright Irving (author)	1900	Emma Willard (educator)	1905
W. Jackson (statesman)	1910	Frances Elizabeth Willard (reformer)	1910
W. ("Stonewall") Jackson		Roger Williams (clergyman)	1920
Warner (officer)	1955	Woodrow Wilson (statesman)	1950
Jefferson (statesman)	1900	Wilbur Wright* (inventor)	1955
Paul Jones (naval officer)	1925		

* Not yet represented by a bust and tablet.

Overseas Press Club of America Awards for 1959

-Best press reporting, daily or wire, from
A. M. Rosenthal, *New York Times*.

-Best radio or television reporting from
CBS News.

-Best photographic reporting (still) from
Henri Cartier-Bresson, *Life Magazine*.

-Best photographic reporting (motion picture)
from abroad: Henry Tolazzi, CBS

-Best magazine reporting of foreign affairs
George Bailey, *The Reporter*.

-Best American press interpretation of
foreign affairs: Walter Lippmann, *New York Tribune*.

Class 7—Best American radio or television interpretation of foreign affairs: Quincy Howe, ABC News.

Class 8—Best book on foreign affairs: Cornelius Ryan for *The Longest Day*.

Class 9—Edwin B. Stout Award for best article or report on Latin America (any medium): Bertram Johansson, *Christian Science Monitor*.

Class 10—E. W. Fairchild Award for the best business news reporting from abroad (any medium): Peter Weaver, McGraw-Hill World News.

Class 11—Robert Capa Award for superlative photography requiring exceptional courage and enterprise abroad: Mario Biasetti, CBS News.

List of Motion Picture Academy Awards

PRODUCTION

- 1928 *Wings*, Paramount
 1929 *The Broadway Melody*, M-G-M
 1930 *All Quiet on the Western Front*, Universal
 1931 *Cimarron*, RKO Radio
 1932 *Grand Hotel*, M-G-M
 1933 *Cavalcade*, Fox
 1934 *It Happened One Night*, Columbia
 1935 *Mutiny on the Bounty*, M-G-M
 1936 *The Great Ziegfeld*, M-G-M
 1937 *The Life of Emile Zola*, Warner
 1938 *You Can't Take It With You*, Columbia
 1939 *Gone With the Wind*, Selznick-M-G-M
 1940 *Rebecca*, Selznick-UA
 1941 *How Green Was My Valley*, 20th Century-Fox
 1942 *Mrs. Miniver*, M-G-M
 1943 *Casablanca*, Warner Bros.
 1944 *Going My Way*, Paramount
 1945 *The Lost Weekend*, Paramount
 1946 *The Best Years of Our Lives*, Goldwyn-RKO Radio
 1947 *Gentleman's Agreement*, 20th Century-Fox
 1948 *Hamlet*, Rank-Two Cities-U-I
 1949 *All the King's Men*, Rossen-Columbia
 1950 *All About Eve*, 20th Century-Fox
 1951 *An American in Paris*, M-G-M
 1952 *The Greatest Show on Earth*, Paramount
 1953 *From Here to Eternity*, Columbia
 1954 *On the Waterfront*, Columbia
 1955 *Marty*, United Artists
 1956 *Around the World in 80 Days*, the Michael Todd Co., Inc.-UA
 1957 *The Bridge on the River Kwai*, Columbia
 1958 *Gigi*, M-G-M
 1959 *Ben-Hur*, M-G-M

ACTRESS AND MOVIE

- 1928 Janet Gaynor, *Seventh Heaven*, *Street Angel*, *Sunrise*
 1929 Mary Pickford, *Coquette*
 1930 Norma Shearer, *The Divorcee*
 1931 Marie Dressler, *Min and Bill*
 1932 Helen Hayes, *The Sin of Madelon Claudet*
 1933 Katharine Hepburn, *Morning Glory*
 1934 Claudette Colbert, *It Happened One Night*
 1935 Bette Davis, *Dangerous*
 1936 Luise Rainer, *The Great Ziegfeld*
 1937 Luise Rainer, *The Good Earth*
 1938 Bette Davis, *Jezebel*
 1939 Vivien Leigh, *Gone With the Wind*
 1940 Ginger Rogers, *Kitty Foyle*
 1941 Joan Fontaine, *Suspicion*
 1942 Greer Garson, *Mrs. Miniver*
 1943 Jennifer Jones, *The Song of Bernadette*
 1944 Ingrid Bergman, *Gaslight*
 1945 Joan Crawford, *Mildred Pierce*
 1946 Olivia de Havilland, *To Each His Own*
 1947 Loretta Young, *Farmer's Daughter*
 1948 Jane Wyman, *Johnny Belinda*

DIRECTOR AND MOVIE

- Frank Borzage, *Seventh Heaven*;
 Lewis Milestone, *Two Arabian Nights*
 Frank Lloyd, *The Divine Lady*
 Lewis Milestone, *All Quiet on the Western Front*
 Norman Taurog, *Skippy*
 Frank Borzage, *Bad Girl*
 Frank Lloyd, *Cavalcade*
 Frank Capra, *It Happened One Night*
 John Ford, *The Informer*
 Frank Capra, *Mr. Deeds Goes to Town*
 Leo McCarey, *The Awful Truth*
 Frank Capra, *You Can't Take It With You*
 Victor Fleming, *Gone With the Wind*
 John Ford, *The Grapes of Wrath*
 John Ford, *How Green Was My Valley*
 William Wyler, *Mrs. Miniver*
 Michael Curtiz, *Casablanca*
 Leo McCarey, *Going My Way*
 Billy Wilder, *The Lost Weekend*
 William Wyler, *The Best Years of Our Lives*
 Elia Kazan, *Gentleman's Agreement*
 John Huston, *Treasure of Sierra Madre*
 Joseph L. Mankiewicz, *A Letter to Three Wives*
 Joseph L. Mankiewicz, *All About Eve*
 George Stevens, *A Place in the Sun*
 John Ford, *The Quiet Man*
 Fred Zinnemann, *From Here to Eternity*
 Elia Kazan, *On the Waterfront*
 Delbert Mann, *Marty*
 George Stevens, *Giant*
 David Lean, *The Bridge on the River Kwai*
 Vincente Minnelli, *Gigi*
 William Wyler, *Ben-Hur*

ACTOR AND MOVIE

- Emil Jannings, *The Way of All Flesh*, *Last Command*
 Warner Baxter, *In Old Arizona*
 George Arliss, *Disraeli*
 Lionel Barrymore, *A Free Soul*
 Fredric March, *Dr. Jekyll and Mr. Hyde*
 Wallace Beery, *The Champ*
 Charles Laughton, *The Private Life of Henry VIII*
 Clark Gable, *It Happened One Night*
 Victor McLaglen, *The Informer*
 Paul Muni, *The Story of Louis Pasteur*
 Spencer Tracy, *Captains Courageous*
 Spencer Tracy, *Boys Town*
 Robert Donat, *Goodbye, Mr. Chips*
 James Stewart, *The Philadelphia Story*
 Gary Cooper, *Sergeant York*
 James Cagney, *Yankee Doodle Dandy*
 Paul Lukas, *Watch on the Rhine*
 Bing Crosby, *Going My Way*
 Ray Milland, *The Lost Weekend*
 Fredric March, *The Best Years of Our Lives*
 Ronald Colman, *A Double Life*
 Sir Laurence Olivier, *Hamlet*

Olivia de Havilland, *The Heiress*
 Judy Holliday, *Born Yesterday*
 Vivien Leigh, *A Streetcar Named Desire*
 Shirley Booth, *Come Back, Little Sheba*
 Audrey Hepburn, *Roman Holiday*
 Grace Kelly, *Country Girl*
 Anna Magnani, *The Rose Tattoo*
 Ingrid Bergman, *Anastasia*
 Jeanne Woodward, *The Three Faces of Eve*
 Susan Hayward, *I Want to Live!*
 Simone Signoret, *Room at the Top*

ACTRESS (SUPPORTING ROLE)

Paula Sondergaard, *Anthony Adverse*
 Alice Brady, *In Old Chicago*
 Mary Bainter, *Jezebel*
 Lucille McDaniel, *Gone With the Wind*
 Anne Darwell, *The Grapes of Wrath*
 Mary Astor, *The Great Lie*
 Teresa Wright, *Mrs. Miniver*
 Marina Paxinou, *For Whom the Bell Tolls*
 Rachel Barrymore, *None But the Lonely Heart*
 Anne Revere, *National Velvet*
 Anne Baxter, *The Razor's Edge*
 Celeste Holm, *Gentleman's Agreement*
 Maureen Trevor, *Key Largo*
 Mercedes McCambridge, *All the King's Men*
 Josephine Hull, *Harvey*
 John Hunter, *A Streetcar Named Desire*
 Gloria Grahame, *The Bad and the Beautiful*
 Anna Reed, *From Here to Eternity*
 Mary Marie Saint, *On the Waterfront*
 Van Fleet, *East of Eden*
 Dorothy Malone, *Written on the Wind*
 Toshiyoshi Umeki, *Sayonara*
 Sandy Hiller, *Separate Tables*
 Kelley Winters, *The Diary of Anne Frank*

Broderick Crawford, *All the King's Men*
 Jose Ferrer, *Cyrano de Bergerac*
 Humphrey Bogart, *The African Queen*

Gary Cooper, *High Noon*
 William Holden, *Stalag 17*
 Marlon Brando, *On the Waterfront*
 Ernest Borgnine, *Marty*
 Yul Brynner, *The King and I*
 Alec Guinness, *The Bridge on the River Kwai*

David Niven, *Separate Tables*
 Charlton Heston, *Ben-Hur*

ACTOR (SUPPORTING ROLE)

Walter Brennan, *Come and Get It*
 Joseph Schildkraut, *The Life of Emile Zola*
 Walter Brennan, *Kentucky*
 Thomas Mitchell, *Stagecoach*
 Walter Brennan, *The Westerner*
 Donald Crisp, *How Green Was My Valley*
 Van Heflin, *Johnny Eager*
 Charles Coburn, *The More the Merrier*

Barry Fitzgerald, *Going My Way*

James Dunn, *A Tree Grows in Brooklyn*
 Harold Russell, *The Best Years of Our Lives*
 Edmund Gwenn, *Miracle on 34th Street*
 Walter Huston, *The Treasure of Sierra Madre*
 Dean Jagger, *Twelve O'Clock High*

George Sanders, *All About Eve*
 Karl Malden, *A Streetcar Named Desire*

Anthony Quinn, *Viva Zapata!*

Frank Sinatra, *From Here to Eternity*
 Edmond O'Brien, *The Barefoot Contessa*
 Jack Lemmon, *Mister Roberts*
 Anthony Quinn, *Lust for Life*
 Red Buttons, *Sayonara*
 Burl Ives, *The Big Country*
 Hugh Griffith, *Ben-Hur*

Some Other Academy Awards for 1959

Best picture (black-and-white): *The Diary of Anne Frank*. Art direction: L. R. Wheeler. Music (scoring musical picture): George W. Davis. Set direction: W. M. and S. A. Reiss.

Best picture (color): *Ben-Hur*. Art direction: John A. Horning and Edward Carfagno. Music (score of dramatic or comedy picture): Miklos Rozsa, *Ben-Hur*.

Best song: "High Hopes" from *A Hole in the Head*. Music by James Van Heusen, lyrics by Sammy Cahn.

Best short subjects (cartoon): *Moonbird*, Storyboard, Inc.

Best short subjects (live action): *The Golden Fish*, Les Requins Associes.

Best sound: *Ben-Hur*, M-G-M Sound Department.

Best special effects: *Ben-Hur*, M-G-M.

Best writing (screenplay based on material from another medium): Neil Paterson, *Room at the Top*.

Best writing (story and screenplay written directly for the screen): *Pillow Talk*. Story: Russell Rouse and Clarence Green. Screenplay: Stanley Shapiro and Maurice Richlin.

Best foreign language film: *Black Orpheus* (French).

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Best writing (screenplay based on material from another medium): Neil Paterson, *Room at the Top*.

New York Drama Critics' Circle Awards

- 1935-36 *Winterset*, by Maxwell Anderson
- 1936-37 *High Tor*, by Maxwell Anderson
- 1937-38 *Of Mice and Men*, by John Steinbeck
- Shadow and Substance*, by Paul Vincent Carroll¹
- 1938-39 (No award)
- The White Steed*, by Paul Vincent Carroll¹
- 1939-40 *The Time of Your Life*, by William Saroyan
- 1940-41 *Watch on the Rhine*, by Lillian Hellman
- The Corn Is Green*, by Emlyn Williams¹
- 1941-42 (No award)
- Blithe Spirit*, by Noel Coward¹
- 1942-43 *The Patriots*, by Sidney Kingsley
- 1943-44 (No award)
- Jacobowsky and the Colonel*, by Franz Werfel-S. N. Behrman¹
- 1944-45 *The Glass Menagerie*, by Tennessee Williams
- 1945-46 (No award)
- Carousel*, by Richard Rodgers & Oscar Hammerstein II²
- 1946-47 *All My Sons*, by Arthur Miller
- No Exit*, by Jean-Paul Sartre¹
- Brigadoon*, by Lerner and Loewe²
- 1947-48 *A Streetcar Named Desire*, by Tennessee Williams
- The Winslow Boy*, by Terence Rattigan¹
- 1948-49 *Death of a Salesman*, by Arthur Miller
- The Madwoman of Chaillot*, by Jean Giraudoux - Maurice Valency¹
- South Pacific*, by Richard Rodgers, Oscar Hammerstein II & Joshua Logan²
- 1949-50 *The Member of the Wedding*, by Carson McCullers
- The Cocktail Party*, by T. S. Elliot¹
- The Consul*, by Gian-Carlo Menotti²
- 1950-51 *Darkness at Noon*, by Sidney Kingsley³
- The Lady's Not for Burning*, by Christopher Fry¹
- Guys and Dolls*, by Abe Burrows, Jo Swerling & Frank Loesser²
- 1951-52 *I Am a Camera*, by John Van Druten⁴
- Venus Observed*, by Christopher Fry¹
- Pal Joey*, by Richard Rodgers, Lorenz Hart & John O'Hara²
- Don Juan in Hell*, by George B. Shaw⁵
- 1952-53 *Picnic*, by William Inge
- The Love of Four Colonels*, by Peter Ustinov¹
- Wonderful Town*, by Joseph Fields, Jerome Chodorov, Betty Comden, Adolph Green & Leonard Bernstein²
- 1953-54 *The Teahouse of the August Moon*, by John Patrick
- Ondine*, by Jean Giraudoux¹
- The Golden Apple*, by John Latouche & Jerome Moross²
- 1954-55 *Cat on a Hot Roof*, by Tennessee Williams
- Witness for the Prosecution*, by Agatha Christie¹
- The Saint of Bleek Street*, by Gian-Carlo Menotti²
- 1955-56 *The Diary of Frank*, by Frank Goodrich & Al Hackett
- Tiger at the Gate*, by Jean Giraudoux
- My Fair Lady*, by Frederick Loewe & Jay Lerner²
- 1956-57 *Long Day's Journey Into Night*, by Eugene O'Neill
- Waltz of the Toys*, by Anouilh¹
- The Most Happy Fella*, by Frank Loesser²
- 1957-58 *Look Homeward, Angel*, by Ketti Frings
- Look Back in Anger*, by John Osborne
- The Music Man*, by Meredith Willson
- 1958-59 *A Raisin in the Sun*, by Lorraine Hansberry
- The Visit*, by Friedrich Dürrenmatt
- La Plume de ma Tante*, by Maurice Valency
- La Plume de ma Tante*, by Robert Dhéry
- Gerard Calvi*²
- 1959-60 *Toys in the Attic*, by Lillian Hellman
- Five Finger Exercise*, by Peter Shaffer
- Fiorello*, by Jerome Weidman, George Abbott, Jerry Robbins & Sheldon Nick²

¹ Citation for best foreign play. ² Citation for best musical. ³ Based on a novel by Arthur Koestler. ⁴ Based on Christopher Isherwood's *Berlin Stories*. ⁵ For "distinguished and original contribution to the theater." ⁶ Based on Sidney Howard's *They Knew What They Wanted*. ⁷ Based on a novel by Thomas Wolfe.

New York Film Critics' Awards

(1—best motion picture; 2—best male performance; 3—best feminine performance; 4—best director; 5—best foreign film; 6—special award.)

- 1940 1. *The Grapes of Wrath*, 20th Century-Fox
2. Charles Chaplin, *The Great Dictator* (refused award)
3. Katharine Hepburn, *The Philadelphia Story*
4. John Ford, *The Grapes of Wrath*
5. *The Baker's Wife* (French)
- 1941 1. *Citizen Kane*, RKO-Mercury
2. Gary Cooper, *Sergeant York*
3. Joan Fontaine, *Suspicion*
4. John Ford, *How Green Was My Valley*
- 1942 1. *In Which We Serve*, UA-Noel Coward
2. James Cagney, *Yankee Doodle Dandy*
3. Agnes Moorehead, *Magnificent Ambersons*
4. John Farrow, *Island*

- Watch on the Rhine*, Warner Bros.
 Paul Lukas, *Watch on the Rhine*
 da Lupino, *The Hard Way*
 George Stevens, *The More the Merrier*
 Going My Way, Paramount
 Barry Fitzgerald, *Going My Way*
 Callulah Bankhead, *Lifeboat*
 Leo McCarey, *Going My Way*
The Lost Weekend, Paramount
 Ray Milland, *The Lost Weekend*
 Ingrid Bergman, *Spellbound* and *The Bells of St. Mary's*
 Billy Wilder, *The Lost Weekend* (None)
The True Glory and The Fighting Lady
The Best Years of Our Lives, Goldwyn-RKO
 Radio
 Laurence Olivier, *Henry V*
 Bette Davis, *Brief Encounter*
 William Wyler, *The Best Years of Our Lives*
Open City (Italian)
Gentleman's Agreement, 20th Century-Fox
 William Powell, *Life With Father*
 Deborah Kerr, *The Adventuress* and *Black Narcissus*
 Ella Kazan, *Gentleman's Agreement* and *Boomerang*
to Live in Peace (Italian)
Treasure of Sierra Madre, Warner Bros.
 Laurence Olivier, *Hamlet*
 Olivia de Havilland, *The Snake Pit*
 John Huston, *Treasure of Sierra Madre*
5. *Paisan* (Italian)
- 1949 1. *All the King's Men*, Rossen-Columbia
 2. Broderick Crawford, *All the King's Men*
 3. Olivia de Havilland, *The Heiress*
 4. Carol Reed, *The Fallen Idol*
 5. *The Bicycle Thief* (Italian)
- 1950 1. *All About Eve*, 20th Century-Fox
 2. Gregory Peck, *Twelve O'Clock High*
 3. Bette Davis, *All About Eve*
 4. Joseph L. Mankiewicz, *All About Eve*
 5. *Ways of Love* (Franco-Italian)
- 1951 1. *A Streetcar Named Desire*, Warner Bros.
 2. Arthur Kennedy, *Bright Victory*
 3. Vivien Leigh, *A Streetcar Named Desire*
 4. Ella Kazan, *A Streetcar Named Desire*
 5. *Miracle in Milan* (Italian)
- 1952 1. *High Noon*, United Artists
 2. Ralph Richardson, *Breaking the Sound Barrier*
 3. Shirley Booth, *Come Back, Little Sheba*
 4. Fred Zinnemann, *High Noon*
 5. *Forbidden Games* (French)
- 1953 1. *From Here to Eternity*, Columbia
 2. Burt Lancaster, *From Here to Eternity*
 3. Audrey Hepburn, *Roman Holiday*
 4. Fred Zinnemann, *From Here to Eternity*
 5. *Justice Is Done* (French)
 6. *A Queen Is Crowned* (JARO) and *The Conquest of Everest* (JARO)
- 1954 1. *On the Waterfront*, Columbia
 2. Marlon Brando, *On the Waterfront*
3. Grace Kelly, *The Country Girl*, *Rear Window*, *Dial M for Murder*
 4. Ella Kazan, *On the Waterfront*
 5. *Gate of Hell* (Japanese)
- 1955 1. *Marty*, United Artists
 2. Ernest Borgnine, *Marty*
 3. Anna Magnani, *The Rose Tattoo*
 4. David Lean, *Summer-time*
 5. *Diabolique* (French) and *Umberto D.* (Italian)
- 1956 1. *Around the World in 80 Days*, The Michael Todd Co., Inc., UA
 2. Kirk Douglas, *Lust For Life*
 3. Ingrid Bergman, *Anastasia*
 4. John Huston, *Moby Dick*
 5. *La Strada* (Italian)
- 1957 1. *The Bridge on the River Kwai*, Columbia
 2. Alec Guinness, *The Bridge on the River Kwai*
 3. Deborah Kerr, *Heaven Knows, Mr. Allison*
 4. David Lean, *The Bridge on the River Kwai*
 5. *Gervaise* (French)
- 1958 1. *The Defiant Ones*, United Artists
 2. David Niven, *Separate Tables*
 3. Susan Hayward, *I Want to Live!*
 4. Stanley Kramer, *The Defiant Ones*
 5. *Mon Oncle* (French)
- 1959 1. *Ben-Hur*, M-G-M
 2. James Stewart, *Anatomy of a Murder*
 3. Audrey Hepburn, *The Nun's Story*
 4. Fred Zinnemann, *The Nun's Story*
 5. *The 400 Blows* (French)

Wedding Anniversary Gifts

Source: *Encyclopaedia Britannica*.

15th year—crystal

20th year—china

25th year—silver

50th year—gold

60th year in Great Britain, 75th year in America—diamond

U. S. Postal Regulations

Source: U. S. Post Office.

FIRST CLASS:

Letters and written and sealed matter: 4¢ for each oz., except that drop letters are subject to 3¢ for each oz. when deposited for local delivery at offices not having letter-carrier service, provided they are not collected or delivered by rural or star-route carriers.

Government postal cards: single, 3¢; double, 6¢.

Private mailing or post cards: 3¢.

Limit of size: Min. size, 2 $\frac{3}{4}$ " x 4"; max. 3-9/16" x 5-9/16".

Limit of weight when mailed from one first-class post office to another: 40 lb. in local, first and second zones, 20 lb. in third to eighth zones.

Limit of weight when mailed to or from second-, third- and fourth-class post offices: 70 lb.

AIR PARCEL POST (OVER 8 OZ. TO 70 LB.):

The zone rates shall apply to mailable matter of any class carried by air. Such matter shall not exceed 100 in. in length and girth combined, including written and other matter of the first class, whether sealed or unsealed.

Parcels weighing less than 10 lb. and measuring more than 84 in., but not more than 100 in. in length and girth combined, shall be subject to the 10-lb. rate.

Parcels containing first-class matter for the weights and zones indicated below must bear postage at the rate of 4¢ for each oz. or fraction thereof:

First-Class Only

Zone	Weighing over	But not over	Pay
1, 2, 3.....	15 oz.	1 lb.	\$0.64
	1 lb. 11 oz.	2 lb.	4¢ ea. oz.
	2 lb. 7 oz.	3 lb.	4¢ ea. oz.
	3 lb. 3 oz.	70 lb.	4¢ ea. oz.
4.....	1 lb. 12 oz.	2 lb.	4¢ ea. oz.
	2 lb. 9 oz.	3 lb.	4¢ ea. oz.
	3 lb. 5 oz.	4 lb.	4¢ ea. oz.
	4 lb. 2 oz.	70 lb.	4¢ ea. oz.
5.....	1 lb. 15 oz.	2 lb.	\$1.28
	2 lb. 13 oz.	3 lb.	4¢ ea. oz.
	3 lb. 11 oz.	4 lb.	4¢ ea. oz.
	4 lb. 9 oz.	5 lb.	4¢ ea. oz.
	5 lb. 7 oz.	6 lb.	4¢ ea. oz.
	6 lb. 5 oz.	7 lb.	4¢ ea. oz.
	7 lb. 3 oz.	8 lb.	4¢ ea. oz.
	8 lb. 1 oz.	70 lb.	4¢ ea. oz.

Other parcels are subject to the following rates:

Air Parcel-Post Zone Rates*

Zone and (miles)	First lb.
First, Second & Third (to 300) .	60¢
Fourth (300-600)	65¢
Fifth (600-1,000)	70¢
Sixth (1,000-1,400)	75¢
Seventh (1,400-1,800)	75¢
Eighth (over 1,800)	80¢

* Fractions of a lb. are charged as a full lb.

The eighth-zone rate shall be charged on air parcel post between the U. S. and Territories and possessions and over A.P.O.'s and Fleet post offices, as well as naval vessels and commands afloat addressed in care of Fleet post offices at New York or San Francisco.

For restrictions to certain A.P.O.'s and F.P.O.'s, consult local post office.

Limit of size to A.P.O. or F.P.O.: 100 in. length and girth; limit of weight: 70 lb.

Air parcels mailed at New York, N. Y., and addressed to Puerto Rico and the Virgin Is. are subject to the seventh-zone rate.

AIRMAIL (LIMIT 8 OZ.):

7¢ for each oz. or fraction thereof within the continental U. S., within any Territory or possession of the U. S., or between any two of the foregoing. This includes airmail matter from Alaska, Hawaii, Puerto Rico, Virgin Islands of the U. S., Canton Island, Christmas Island, Guam, and any other place where the U. S. mail service is in operation.

Post cards: 5¢.

SECOND CLASS (NO WEIGHT LIMIT)

Newspapers, magazines, and other publications containing notice of second-class entry.

For rates for publications mailed by publishers or registered news agents, consult local postmaster.

Transient rate for matter mailed by others than the publishers or registered news agents: 2¢ for the first 2 oz., 1¢ for each additional oz. However, if the fourth-class rate is cheaper, it shall apply.

THIRD CLASS (UNDER 16 OZ.):

Merchandise, books, printed matter, all other mailable matter not in first or second class.

Regular rate: 3¢ for the first 2 oz., 1¢ for each additional oz.

Bulk rate: fee \$20 per year or fraction thereof, separately addressed in pieces of third-class matter in quantity of not less than 20 lb. or of not less than 200 pieces are subject to the lb. rate of postage applicable to the entire quantity mailed at one time.

Catalog Zone Rates

One rates below shall apply to individually addressed catalogs and similar printed advertising matter in bound form weighing more than 8 oz. but not exceeding 10 lb.

	Zones and (miles)							
	Local	1 & 2 (to 150)*	3 (150-300)	4 (300-600)	5 (600-1,000)	6 (1,000-1,400)	7 (1,400-1,800)	8 (Over 1,800)
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
.....	14	16	18	20	22	24	26	28
.....	16	20	22	24	26	29	32	35
.....	18	23	25	27	29	33	37	41
.....	18	24	26	28	31	36	40	45
.....	19	25	28	30	34	39	44	50
.....	20	27	29	32	36	42	48	54
.....	20	28	31	34	39	45	51	59
.....	21	29	32	36	41	48	55	63
.....	22	30	34	38	43	51	59	68
.....	22	31	35	40	46	54	62	72
.....	23	33	37	42	48	57	66	77
.....	24	34	38	44	51	60	70	81
.....	25	35	40	46	53	63	74	86
.....	25	36	41	47	55	66	77	90
.....	26	37	43	49	58	69	81	95
.....	27	39	44	51	60	72	85	99
.....	27	40	46	53	63	75	88	104
.....	28	41	47	55	65	78	92	108

Zone: In the first or second zone, where the distance by the shortest regular practicable mail route is 300 miles or more, the rate shall be the same as for the third zone.

These rates apply to individually addressed catalogs and similar printed advertising matter in bound form, 6 ounces or over, but not exceeding 10 pounds, and consisting of 24 or more pages.

Bulk rate for miscellaneous printed matter, etc., is 16¢ for each lb., with a minimum charge of 2½¢ per piece. For bound catalogs of 24 pages or more, etc., the rate is 10¢ for each lb., with a minimum charge of 2½¢ per piece. Matter of such size or form as to prevent mailing and tying in bundles and re-individual distributing throughout singly or in bulk are subject to a minimum charge of 3½¢ each.

CLASS (PARCEL POST) 16 OZ. (1 LB. 0 OZ.)

Merchandise, books, printed matter, and other mailable matter not in first, second or third classes.

One rates opposite shall apply to all class matter, except catalogs, books, newspapers, publications or records for sale, and certain controlled circulars and publications.

Size: 72 in. in length and girth.

Weight: 16 oz. to 40 lb. in local, second zones, 16 oz. to 20 lb. in third and fourth zones.

The following five items have a maximum size of 100 in. in length and girth, a weight limit of 16 oz. to 20 lb.: (1) parcels sent to or from rural post offices; (2) parcels sent to or from third-, fourth-, and fourth-class post offices; (3) parcels containing baby fowl, plants, trees, shrubs, or agricultural products (not including manufactured products thereof); (4) parcels containing perishable foodstuffs; (5) parcels mailed between the

U. S. and any Army or Fleet post office or between the U. S. and any Territory or possession of the U. S.

BOOKS (LIMIT 70 LB.):

Books (containing no advertising matter other than incidental announcements of books), 16-mm. film in final state for viewing, 16-mm. film catalogs, school test materials, printed music (in bound or sheet form), phonograph recordings, and manuscripts for books, periodical articles, and music, 9¢ first lb., 5¢ each additional lb. (Rate applies for films and catalogs except when mailed to commercial theaters.) Must be endorsed "Educational Material."

LIBRARY BOOKS (LIMIT 70 LB.):

Books sent by authorized libraries to readers and when returned by such readers, 4¢ first lb., 1¢ each additional lb. Rate also applies to printed music (in bound or sheet form), bound volumes of academic theses, phonograph recordings and other library materials.

MONEY ORDERS:

Money orders for amounts from 1¢ to \$100 are issued upon written application made by the remitter or his agent showing the amount of the order and the names and addresses of payee and remitter.*

Amount of order	Fee
\$.01 to \$ 5.00	15¢
5.01 to 10.00	20¢
10.01 to 100.00	30¢

* As of Oct. 1, 1955, 1st- and 2nd-class post offices will issue money orders without written application.

Fourth-Class Zone Rates

Weight, 1 pound and not exceeding	Zones and (miles)							
	Local	1 & 2 (to 150)*	3 (150-300)	4 (300-600)	5 (600-1,000)	6 (1,000-1,400)	7 (1,400-1,800)	8 (Over 1,800)
2 pounds.....	\$0.24	\$0.33	\$0.35	\$0.39	\$0.45	\$0.51	\$ 0.58	\$ 0.64
3 pounds.....	.26	.38	.41	.47	.55	.64	.74	.84
4 pounds.....	.28	.43	.47	.55	.65	.77	.90	1.06
5 pounds.....	.30	.48	.53	.63	.75	.90	1.06	1.22
6 pounds.....	.32	.53	.59	.70	.85	1.03	1.22	1.38
7 pounds.....	.34	.58	.65	.77	.95	1.16	1.38	1.54
8 pounds.....	.36	.63	.71	.84	1.05	1.29	1.54	1.70
9 pounds.....	.38	.68	.77	.91	1.15	1.42	1.70	1.96
10 pounds.....	.40	.73	.83	.98	1.25	1.55	1.86	2.02
11 pounds.....	.42	.77	.89	1.05	1.35	1.67	2.02	2.28
12 pounds.....	.44	.81	.95	1.12	1.45	1.79	2.18	2.44
13 pounds.....	.46	.85	1.01	1.19	1.55	1.91	2.34	2.60
14 pounds.....	.48	.89	1.07	1.26	1.65	2.03	2.50	2.76
15 pounds.....	.50	.93	1.13	1.33	1.75	2.15	2.66	2.92
16 pounds.....	.52	.97	1.18	1.40	1.85	2.27	2.81	3.07
17 pounds.....	.54	1.01	1.23	1.47	1.95	2.39	2.96	3.22
18 pounds.....	.56	1.05	1.28	1.54	2.05	2.51	3.11	3.37
19 pounds.....	.58	1.09	1.33	1.61	2.15	2.63	3.26	3.52
20 pounds.....	.60	1.13	1.38	1.68	2.25	2.75	3.41	3.67
21 pounds.....	.62	1.17	1.43	1.75	2.34	2.87	3.56	3.83
22 pounds.....	.64	1.21	1.48	1.82	2.43	2.99	3.71	3.99
23 pounds.....	.66	1.25	1.53	1.89	2.52	3.11	3.86	4.15
24 pounds.....	.68	1.29	1.58	1.96	2.61	3.23	4.01	4.31
25 pounds.....	.70	1.33	1.63	2.03	2.70	3.35	4.16	4.42
26 pounds.....	.72	1.37	1.68	2.10	2.79	3.47	4.31	4.58
27 pounds.....	.74	1.41	1.73	2.17	2.88	3.59	4.46	4.74
28 pounds.....	.76	1.45	1.78	2.24	2.97	3.71	4.61	4.89
29 pounds.....	.78	1.49	1.83	2.31	3.06	3.83	4.76	5.02
30 pounds.....	.80	1.53	1.88	2.38	3.15	3.95	4.91	5.17
31 pounds.....	.82	1.57	1.93	2.45	3.24	4.06	5.05	5.31
32 pounds.....	.84	1.61	1.98	2.52	3.33	4.17	5.19	5.45
33 pounds.....	.86	1.65	2.03	2.59	3.42	4.28	5.33	5.69
34 pounds.....	.88	1.69	2.08	2.66	3.51	4.39	5.47	5.75
35 pounds.....	.90	1.73	2.13	2.73	3.60	4.50	5.61	5.91
36 pounds.....	.92	1.77	2.18	2.80	3.69	4.61	5.75	6.07
37 pounds.....	.94	1.81	2.23	2.87	3.78	4.72	5.89	6.23
38 pounds.....	.96	1.85	2.28	2.94	3.87	4.83	6.03	6.39
39 pounds.....	.98	1.89	2.33	3.01	3.96	4.94	6.17	6.53
40 pounds.....	1.00	1.93	2.38	3.08	4.05	5.05	6.31	6.67
41 pounds.....	1.02	1.97	2.43	3.15	4.14	5.16	6.45	6.81
42 pounds.....	1.04	2.01	2.48	3.22	4.23	5.27	6.59	6.97
43 pounds.....	1.06	2.05	2.53	3.29	4.32	5.38	6.73	7.13
44 pounds.....	1.08	2.09	2.58	3.36	4.41	5.49	6.87	7.29
45 pounds.....	1.10	2.13	2.63	3.43	4.50	5.60	7.01	7.45
46 pounds.....	1.12	2.17	2.68	3.50	4.59	5.71	7.15	7.61
47 pounds.....	1.14	2.21	2.73	3.57	4.68	5.82	7.29	7.77
48 pounds.....	1.16	2.25	2.78	3.64	4.77	5.93	7.43	7.93
49 pounds.....	1.18	2.29	2.83	3.71	4.86	6.04	7.57	8.09
50 pounds.....	1.20	2.33	2.88	3.78	4.95	6.15	7.71	8.25
51 pounds.....	1.22	2.37	2.93	3.84	5.03	6.26	7.84	8.41
52 pounds.....	1.24	2.41	2.98	3.90	5.11	6.37	7.97	8.57
53 pounds.....	1.26	2.45	3.03	3.96	5.19	6.48	8.10	8.73
54 pounds.....	1.28	2.49	3.08	4.02	5.27	6.59	8.23	8.89
55 pounds.....	1.30	2.53	3.13	4.08	5.35	6.70	8.36	9.05
56 pounds.....	1.32	2.57	3.18	4.14	5.43	6.81	8.49	9.21
57 pounds.....	1.34	2.61	3.23	4.20	5.51	6.92	8.62	9.37
58 pounds.....	1.36	2.65	3.28	4.26	5.59	7.03	8.75	9.53
59 pounds.....	1.38	2.69	3.33	4.32	5.67	7.14	8.88	9.69
60 pounds.....	1.40 ⁺¹	2.73 ⁺²	3.38 ⁺³	4.38 ⁺⁴	5.75 ⁺⁵	7.25 ⁺⁶	9.01 ⁺⁷	10.00

¹ 2¢ for ea. lb. over 60 lbs. ² 4¢ for ea. lb. over 60 lbs. ³ 5¢ for ea. lb. over 60 lbs. ⁴ 6¢ for ea. lb. over 60 lbs. ⁵ 8¢ for ea. lb. over 60 lbs. ⁶ 11¢ for ea. lb. over 60 lbs. ⁷ 13¢ for ea. lb. over 60 lbs. ⁸ 16¢ for ea. lb. over 60 lbs.

EXCEPTIONS

* In the first or second zone, where the distance by the shortest regular practicable mail route is 300 miles or more, the rate is the same as for the third zone.

Note.—Parcels less than 10 pounds, measuring over 84 inches but not exceeding 100 inches in length and girth combined, are chargeable with a minimum rate equal to that for a 10-pound parcel for the zone to which addressed.

Delivery and Special Handling

	Special delivery First 2nd, 3rd, class* 4th class		Special handling (4th class only)
1b.	80¢	45¢	25¢
1b.	45¢	55¢	35¢
1b.	60¢	70¢	50¢

ing air parcel post.

repayment of the special-delivery
les mail to the most expeditious
and special delivery.

ment of the special-handling fee
fourth-class matter to the most
us handling, transportation, and
possible, but not special delivery.

REGISTERED MAIL:

or domestic registered mail (first-
and third-class matter, and sealed
class matter on which postage at
class rate has been paid):

	Fee if mailer has no commercial or other insurance	Fee if mailer has commercial or other insurance
Declared value (be full value)		
to \$ 10.00	\$.50 ¹	\$.50 ²
to 100.00	.75 ¹	.75 ²
to 200.00	1.00 ¹	1.00 ²
to 400.00	1.25 ¹	1.25 ²
to 600.00	1.50 ¹	1.50 ²
to 800.00	1.75 ¹	1.75 ²
to 1,000.00	2.00 ¹	2.00 ²
to 2,000.00	2.25 ¹	2.15 ²
to 3,000.00	2.50 ¹	2.30 ²
to 4,000.00	2.75 ¹	2.45 ²
to 5,000.00	3.00 ¹	2.60 ²
to 6,000.00	3.25 ¹	2.75 ²
to 7,000.00	3.50 ¹	2.90 ²
to 8,000.00	3.75 ¹	3.05 ²
to 9,000.00	4.00 ¹	3.20 ²
to 10,000.00	4.25 ¹	3.35 ²
to 1,000,000.00	4.25+ ^{4,5}	3.35+ ^{4,5}
to 15,000,000.00	152.75+ ^{4,5}	151.85+ ^{4,5}
over 15,000,000.00	(4.7)	(3.7)

ability: declared value. ²Postal liability:
ue or prorated. ³Postal liability: \$1,000
prorated. ⁴Postal liability: \$10,000. ⁵Fee
cents per \$1,000 or fraction above \$10,000.
ed 10 cents per \$1,000 or fraction above
⁷Additional fee charges may be applied
sideration of weight, space and value.

ed delivery, 50¢. Return receipts:
o whom and when delivered, 10¢;
when and address where deliv-
requested after mailing, show-
om and when delivered, 25¢.

REGISTERED MAIL:

mail service provides for a
the sender and a record of de-
the office of address. No record
the office where mailed. It is
the ordinary mails and no in-
verage is provided.

t-class mail having no intrinsic
be accepted as certified mail.

This does not exclude articles of a non-
negotiable character and other matter
which would involve a cost of duplication
if lost or destroyed. The mail may be sent
by air on payment of the required postage.
Return receipt service, requested at the
time of mailing only, and special delivery
service are available.

Fees are as follows: Fee in addition to
postage, 20¢; return receipt showing to
whom and when delivered, 10¢; return re-
ceipt showing to whom, when, and address
where delivered, 35¢; restricted delivery,
50¢.

INSURED MAIL:

Fees for domestic insured mail (third-
and fourth-class matter):

Insurance coverage	Fee
\$ 0.00 to \$ 10.00	10¢
10.01 to 50.00	20¢
50.01 to 100.00	30¢
100.01 to 200.00	40¢

C.O.D. MAIL:

Fees for domestic unregistered C.O.D.
mail (third- and fourth-class matter and
sealed domestic mail matter of any class
bearing postage at the first-class rate):

Indemnity limit	Fee
\$.01 to \$ 5.00	.30
5.01 to 10.00	.40
10.01 to 25.00	.60
25.01 to 50.00	.70
50.01 to 100.00	.80
100.01 to 150.00	.90
150.01 to 200.00	1.00

Fees for domestic registered C.O.D. mail
(sealed domestic mail of any class bearing
postage at the first-class rate):

Amount collectible and indemnity payable	Fee
\$.01 to \$ 10.00	.80
10.01 to 50.00	1.10
50.01 to 100.00	1.20
100.01 to 200.00*	1.40

* Limit of collections.

When indemnity in excess of \$200 is de-
sired, the fees for domestic registered
C.O.D. mail are:

Indemnity limit	Fee
\$200.01 to \$ 300.00	\$1.50
300.01 to 400.00	1.60
400.01 to 500.00	1.70
500.01 to 600.00	1.80
600.01 to 700.00	1.90
700.01 to 800.00	2.00
800.01 to 1000.00	2.10

MISCELLANEOUS:

In registered and insured mail, a receipt
card will be returned to the sender upon

request. When a card is requested showing to whom and when the delivery was made, the rate is 10¢ if the request is made at the time of mailing, 25¢ if made thereafter. When a card is requested showing to whom and when the delivery was made and the address, the rate is 35¢ and must be paid at the time of mailing.

Fees for effecting delivery of domestic registered, insured, and C.O.D. mail to addressee only or to addressee on order: 50¢.

Fee for notifying sender or his representative of inability to deliver a C.O.D. article: 5¢.

Certificates of mailing for ordinary mail of any class: 5¢ for each article described thereon. Additional certificates for ordinary, registered, insured and C.O.D. mail: 2¢ for each article described thereon.

C.O.D. mail cannot be sent to Navy per-

sonnel on board ships or at overseas stations.

FOREIGN REGULAR MAIL:

Letters and letter packages: To Canada and Mexico, 4¢ per oz. or fraction. To other countries, 8¢ for 1st oz., 5¢ per additional oz. or fraction. Weight limit: 6 oz. (60 lb. to Canada).

Post cards: To Canada and Mexico, 6¢ with reply paid. To all other countries, 5¢ each, 10¢ with reply paid.

FOREIGN AIRMAIL:

Air-letter sheets: Air letters, consisting of sheets which can be folded into form of an envelope and sealed, acceptable for dispatch by airmail to all foreign countries. The sheets are sold at post offices at 10¢ each. No enclosures, adhesive tape or stickers are permitted.

Post cards: 5¢ each to Canada and Mexico; 10¢ each to all other countries.

Airmail Rates from U. S. to Selected Countries

Country	Air-mail ¹	Air parcel post			Country	Air-mail ¹	Air parcel post	
		Initial unit ²	Addl. weight ³	Limit, lbs.			Initial unit ²	Addl. weight ³
Albania.....	\$.15	....	....	..	Indonesia.....	\$.25	\$1.75	\$1.00
Algeria.....	.15	....	....	..	Iran.....	.25	1.47	.72
Argentina.....	.10	\$1.51	\$.76	44	Iraq.....	.25	1.47	.72
Australia.....	.25	1.62	1.27	22	Ireland.....	.15	.97	.37
Austria.....	.15	1.05	.49	44	Israel.....	.25	1.42	.67
Bahamas.....	.10	.83	.14	22	Italy.....	.15	1.08	.50
Belgium.....	.15	.98	.43	44	Jamaica.....	.10	.95	.18
Bermuda.....	.10	.76	.13	22	Japan.....	.25	1.27	.91
Bolivia.....	.10	1.08	.40	44	Jordan.....	.25	1.27	.65
Brazil.....	.10	1.48	.64	44 ⁴	Korea, Rep. of.....	.25	1.37	1.01
British Guiana.....	.10	1.07	.39	22	Lebanon.....	.25	1.22	.64
British Honduras.....	.10	.80	.20	22	Liberia.....	.25	.86	.56
Bulgaria.....	.15	....	....	..	Mexico.....	.07 ⁵	.64	.18
Burma.....	.25	....	....	..	Morocco.....	.15	1.19	.54
Canada ⁶ , ⁸.....	.07	....	....	..	Netherlands.....	.15	.89	.44
Ceylon.....	.25	1.75	1.00	22	New Zealand.....	.25	1.82	1.17
Chile.....	.10	1.31	.56	22	Nicaragua.....	.10	.80	.29
China ⁹.....	.25	1.43 ⁸	1.08	44	Norway.....	.15	1.02	.47
Colombia.....	.10	1.21	.40	44	Pakistan.....	.25	1.63	.84
Costa Rica.....	.10	.79	.29	44	Panamá.....	.10	.91	.21
Cuba.....	.10	(⁹)	(⁹)	22	Paraguay.....	.10	1.00	.50
Czechoslovakia.....	.15	.88	.48	44	Peru.....	.10	1.23	.37
Denmark.....	.15	.97	.47	44	Philippines.....	.25	1.81	1.26
Dominican Republic.....	.10	.86	.22	44	Poland.....	.15	1.06	.52
Ecuador.....	.10	1.24	.33	44	Portugal.....	.15	.71	.44
Egypt.....	.15	1.35	.64	44	Romania.....	.15	....	....
El Salvador.....	.10	1.02	.26	44	Saudi Arabia.....	.25	1.60 ¹¹	.80 ¹¹
Ethiopia.....	.25	1.34	.76	44	Spain.....	.15	1.25	.50
Finland.....	.15	.88	.51	44	Surinam.....	.10	.92	.41
France.....	.15	1.22	.44	44	Sweden.....	.15	.85	.49
French Guiana.....	.10	.79	.44	11	Switzerland.....	.15	.92	.46
Germany.....	.15	.95	.45	44 ⁷	Syria.....	.25	1.22	.64
Greece.....	.15	1.07	.57	22	Thailand.....	.25	2.29	1.50
Guatemala.....	.10	1.01	.25	44	Turkey.....	.15	1.15	.57
Haiti.....	.10	.72	.21	44	U. of S. Africa.....	.25	1.31	.94
Honduras, Rep. of.....	.10	.78	.28	44 ¹⁰	U.S.S.R.....	.15	1.66	.63
Hong Kong.....	.25	1.74	1.39	22	United Kingdom ¹⁴.....	.15	1.00	.41
Hungary.....	.15	....	....	..	Uruguay.....	.10	1.26	.76
Iceland.....	.15	.89	.33	44	Venezuela.....	.10	1.27	.36
India.....	.25	1.70	.96	22	Yugoslavia.....	.15	.87	.52

(Footnotes are on opposite page.)

The White House

Source: National Park Service.

White House, the official residence of president, is located on Pennsylvania in Washington, D. C. The site covering 18 acres was selected by President George Washington and Pierre Charles L'Enfant. The architect was James Hoban. The design of the mansion is said to have been based by the Duke of Leinster's Palace in Ireland. The cornerstone was laid Oct. 13, 1792, and the first residents were President George Washington and Mrs. John Adams in Nov., 1800. The White House was fired by the British in 1814. The sandstone exterior was painted white during the course of construction.

Rooms for public functions are on the second floor. On the second and third are the president's apartments. The most celebrated room is the East Room, where formal dinners take place. Other public rooms are the Blue Room, the Green Room, and the

Blue Room. The State Dining Room is used for formal dinners.

The Executive Office, a three-story structure at the west end of the West Terrace, was added to the original building in 1902 to accommodate the President's office staff, and several additions have since been made. In 1942, a three-story building was erected at the end of the East Terrace, and now serves as the White House main entrance. In 1946, a second-story balcony was added to the White House inside the Ionic pillars of the south portico.

From Nov., 1948, to Mar., 1952, the White House was closed for social engagements and sightseers because of a full-scale renovation of the building. The walls were retained and strengthened, and the interior was rebuilt. There are now 132 rooms instead of the former 62.

The Great Seal of the United States

On Sept. 4, 1776, the Continental Congress appointed a committee consisting of Benjamin Franklin, John Adams and Thomas Jefferson "to bring in a device for the Great Seal of the United States of America." After many delays, a verbal description of the seal was given by William Barton and was finally adopted by Congress on June 20, 1782. The seal shows an American bald eagle with a shield on its chest and a ribbon in its mouth bearing the

device *E pluribus unum* (One out of many). In its talons are the arrows of war and an olive branch of peace.

"In God We Trust"

"In God We Trust" first appeared on U.S. coins after April 22, 1864, when Congress passed an act authorizing the coinage of a 2-cent piece bearing this motto. Thereafter, Congress extended its use to other coins. On July 30, 1956, it became the national motto.

Footnotes for Table on Opposite Page.

Letters and letter packages. Unless otherwise indicated, rate shown is per each ½ oz., weight is limited to 4 lb., 6 oz. For rates for commercial papers, printed matter, samples of merchandise, small packages, 8-oz. merchandise packages, combination packages and groups grouped together, consult local postmaster. ² Rate for 4 oz. or fraction thereof. ³ For each additional 4 oz. or fraction thereof. ⁴ Parcels for Brazil exceeding 22 lb. are for following offices only: Belem (Para), Belo Horizonte, Florianopolis, Fortaleza, Pelotas, Porto Alegre, Recife (Pernambuco), Rio de Janeiro, Rio Grande (Rio Grande do Sul), Salvador (Bahia), Santos and Sao Paulo. ⁵ Per oz.; post cards each 5¢. ⁶ Articles up to 60 lb. in weight. ⁷ Gift parcels to East Germany are limited to 22 lb.; other parcels weigh up to 44 lb. ⁸ Parcels for many offices are limited to 11 lb., 22 lb. or 44 lb., consult local postmaster for limitations. ⁹ Service to Cuba is limited to parcels weighing 4 oz. and up to 22 lb. Cost for initial weight unit, which is over 8 oz. and up to 12 oz., is 15¢. Each additional 4 oz. or fraction is 15¢. Packages weighing 8 oz. or less must not contain customs declarations or parcel post stickers attached. ¹⁰ Parcels for Honduras exceeding 22 lb. accepted for following offices only: Amapala, Comayagua, La Ceiba, Olanchito, Puerto Castillo, Puerto Cortez, San Pedro Sula, Tegucigalpa and Tela. ¹¹ Parcels from Arabia limited to the following places only: Al Gaba, Al Lith, Al Wejh, Doha, Dhahran, Hassa, Jiddah, Jizam, Katif, Khobar, Mecca, Medina, Qunfidha, Rabigh, Ridda, Rivadh, Umm Lej and Yenbo. ¹² Limit to Chahba and Salkhad is 11 lb.; limit to Beirut and Yabroud is 22 lb. ¹³ Parcels for Lebanon exceeding 11 lb. not accepted for following offices, Ain-Zhalta, Baino, Falougha, Hermel, Koubayat, Maaser-el-Chouf, Ras-el-Ein and Souk-el-Gharb. NOTE: For rates to countries not shown in this table, consult local postmaster. Leaders (....) indicate that there is no air-parcel-post service to the

¹⁴ Great Britain and Northern Ireland.

SCIENCE



MEASURES AND WEIGHTS

UNITS OF LENGTH

Metric System

The meter was originally intended to be one ten-millionth of the earth's quadrant, a quadrant being one-quarter of a circumference. However, because of the difficulty of determining such a length with accuracy, this definition was abandoned. The meter is now considered to be the distance at 0°C between two microscopic marks on the International Prototype Meter, a platinum-iridium bar, kept by the International Bureau of Weights and Measures at Sèvres, France, a suburb of Paris.

In 1927, the International Conference on Weights and Measures adopted a secondary definition of the meter in terms of light-waves. According to this definition, one meter is equivalent to 1,553,164.13 wave lengths of the red light from cadmium.

Unit	Comparison	English equivalent
Millimeter (mm)	.001 meter	.0394 inch
Centimeter (cm)	.01 meter	.3937 inch
Decimeter (dm)	.1 meter	3.937 inches
Meter (m)		3.2808 feet
Dekameter (dkm)	10 meters	32.8083 feet
Hectometer (hm)	100 meters	328.0833 feet
Kilometer (km)	1000 meters	.62137 mile

English System

According to legend, the yard was established by Henry I as the distance from the point of his nose to the end of his thumb when his arm was outstretched. The British Imperial Yard was defined in 1878 by the Weights and Measures Act as the distance at 62°F between two fine lines of gold studs sunk in a bronze bar known as the "No. 1 Standard Yard." This is equivalent to .914399 meter. In the United States the yard is defined in terms of the meter, using as a standard the U. S. Prototype Meter. According to this definition, the yard is 3600/3937 (or .914402) meter, slightly longer than the British Imperial Yard.

Unit	Comparison	Metric equivalent
inch (in.)		25.4000 millimeter
Foot (ft)	12 inches	.3048 meter
Yard (yd)	36 inches 3 feet	.9144 meter
Rod (rd)	16½ feet 5½ yards	5.0292 meters
Furlong (fur.)	660 feet 220 yards 40 rods	201.1684 meters
Mile (mi)*	5280 feet 1760 yards 320 rods 8 furlongs	1.6093 kilometers

* Known as statute mile. See nautical mile under Miscellaneous Units.

UNITS OF AREA

Metric System

Unit	Comparison	English equivalent
Square millimeter (mm²)	.000001 m²	.0015 sq in.
Square centimeter (cm²)	.0001 m²	.155 sq in.
Square decimeter (dm²)	.01 m²	15.5 sq in.
Square meter (m²)*		10.7639 sq ft
Square dekameter (dkm²)†	100 m²	3.9537 sq rd
Square hectometer (hm²)‡	10,000 m²	2.471 acres
Square kilometer (km²)	1,000,000 m²	.3861 sq mi

English System

Unit	Comparison	Metric equivalent
Square inch (sq in.)		6.4516 cm²
Square foot (sq ft)	144 sq in.	.0929 m²
Square yard (sq yd)	1296 sq in. 9 sq ft	.8361 m²
Square rod (sq rd)	272¼ sq ft 30¼ sq yds	25.293 m²
Acre	43,560 sq ft 4,840 sq yd 160 sq rd	.4047 ha
Square mile (sq mi)	27,878,400 sq ft 3,097,600 sq yd 102,400 sq rd 640 acres	2.5900 km²

* Also known as a centare (ca).

† Also known as an are (a).

‡ Also known as a hectare (ha).

UNITS OF VOLUME

Metric System

Unit	Comparison	English equivalent
Cubic millimeter (mm³)	.000000001 m³	.00006 cu in.
Cubic centimeter (cm³)	.000001 m³	.061 cu in.
Cubic decimeter (dm³)	.001 m³	61.0234 cu in.
Cubic meter (m³)*		35.3145 cu ft

* Also known as a stere (s).

English System

Unit	Comparison	Metric equivalent
Cubic inch (cu in.)		16.3872 cm³
Cubic foot (cu ft)	1728 cu in.	.0283 m³
Cubic yard (cu yd)	46,656 cu in. 27 cu ft	.7646 m³
Cord (cd)	128 cu ft	3.6246 m³

UNITS OF WEIGHT OR MASS

term *mass* denotes the amount of contained in an object, while the *weight* denotes the gravitational pull on the object. For practical purposes, the two terms are synonymous.

Metric System

The gram was originally intended to be the mass of one cubic centimeter of water at 4°C. However, because of

the difficulty of making exact measurement, a small error was made; and it has since been found that a kilogram of pure water occupies 1.000028 cubic decimeters. The standard for the kilogram is a platinum-iridium cylinder, called the International Prototype Kilogram, which is kept at the International Bureau of Weights and Measures in France.

	Comparison	Avdp.	English equivalents Troy	Apoth.
(mg)	.001 gram	.0154 grain	.0154 grain	.0154 grain
(cg)	.01 gram	.1543 grain	.1543 grain	.1543 grain
(dg)	.1 gram	1.5432 grains	1.5432 grains	1.5432 grains
(dkg)	10 grams	.0353 ounce	.0322 ounce	.0322 ounce
(hg)	100 grams	.3527 ounce	.3215 ounce	.3215 ounce
(kg)	1000 grams	3.5274 ounces	3.2151 ounces	3.2151 ounces
(t)	1000 kg	2.2046 pounds	2.6792 pounds	2.6792 pounds
		1.1023 tons*		

* Short tons. A metric ton is equivalent to .9842 long ton.

English System

The English System is complicated by the existence of three different kinds of *avoirdupois weight*, used for commerce; *troy weight*, used for weighing gold, silver, etc.; and *apothecaries weight*, used for making up medical preparations.

The British Imperial Pound (*avoirdupois*) is defined as the mass of a pure plat-

inum cylinder kept by the Standards Department of the Board of Trade. In the United States, the pound (*avoirdupois*) is defined in terms of the kilogram, using as a standard the U. S. Prototype Kilogram. According to this definition, the pound is equal to .4535924277 kilogram, making it infinitesimally smaller than the British Imperial Pound.

Avoirdupois Weight

	Comparison	Metric equivalent
		.0648 gram
(avdp)	27.3438 grains	1.7718 grams
(avdp)	16 drams	28.3495 grams
	437.5 grains	
(avdp)	7000 grains	4536 kilogram
	256 drams	
	16 ounces	
(light cwt)*	100 pounds	45.3592 kilograms
	2000 pounds	.9072 metric ton

The pound as the short hundredweight, which is in use in the United States and Canada. Great Britain uses the long hundredweight (112 lb or 50.8024 kg).

The ton as the short ton, which is in use in the United States and Canada. Great Britain uses the long ton (2,240 lb or 1.01605 metric tons).

Troy Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Pennyweight (dwt)	24 grains	1.5552 grams
Ounce (oz t)	480 grains	31.1035 grams
	20 pennyweights	
Pound (lb t)*	5760 grains	.3732 kilogram
	240 pennyweights	
	12 ounces	

* Declared illegal in Great Britain.

Apothecaries Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Scruple (s ap or ℥)	20 grains	1.296 grams
Dram (dr ap or ℥)	60 grains	3.8879 grams
	3 scruples	
Ounce (oz ap or ℥)	480 grains	31.1035 grams
	24 scruples	
	8 drams	
Pound (lb ap)	5760 grains	.3732 kilogram
	288 scruples	
	96 drams	
	12 ounces	

UNITS OF CAPACITY

Metric System

The liter is a secondary unit of capacity, defined as the volume occupied by one kilogram of pure water at 4°C. It was intended that the liter should exactly equal one cubic decimeter, but as an error was introduced in the measurement, it has since been found to equal 1.000028 cubic decimeters.

Unit	Comparison	English equivalents Liquid	Dry
Milliliter (ml)	.001 liter	.0338 fl oz	.0018 pt
Centiliter (cl)	.01 liter	.3381 fl oz	.0182 pt
Deciliter (dl)	.1 liter	3.3815 fl oz	.1816 pt
Liter (l)		1.0567 qt	.9081 qt
Dekaliter (dcl)	10 liters	2.6418 gal	1.1351 pk
Hectoliter (hl)	100 liters	26.4178 gal	2.8378 bu

English System

In Great Britain, the standard unit of capacity for measuring both liquid and dry commodities is the British Imperial Gallon. It is defined as the volume of ten pounds of pure water at 62°F and contains 277.418 cubic inches. The bushel is defined as eight gallons (2218.192 cubic inches).

In the United States, there are two separate standards. The unit for measuring liquids is the gallon, which is defined as 231 cubic inches; the unit for measuring dry commodities is the bushel, which is defined as 2150.42 cubic inches.

UNITS OF CIRCULAR MEASURE

Unit	Comparison
Second (")	
Minute (')	60 seconds
Degree (°)	60 minutes
Right angle	90 degrees
Straight angle	180 degrees
Circle	360 degrees

Circumference

Circle: $C=\pi d$, in which π is 3.1416 and d the diameter.

Area

Triangle: $A=\frac{ab}{2}$, in which a is the base and b the height.

Square: $A=a^2$, in which a is one of the sides.

Rectangle: $A=ab$, in which a is the base and b the height.

Trapezoid: $A=\frac{h(a+b)}{2}$, in which h is the height, a the longer parallel side, and b the shorter.

Regular pentagon: $A=1.720a^2$, in which a is one of the sides.

Regular hexagon: $A=2.598a^2$, in which a is one of the sides.

Regular octagon: $A=4.828a^2$, in which a is one of the sides.

Circle: $A=\pi r^2$, in which π is 3.1416 and r the radius.

Volume

Cube: $V=a^3$, in which a is one of the edges.

Rectangular prism: $V=abc$, in which a is the length, b the width, and c the depth.

Pyramid: $V=\frac{Ah}{3}$, in which A is the area of the base and h the height.

Liquid Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Minim (min or m)*		.0038	.0616 ml
Fluid dram (fl dr)	60 min	.2256	3.6966 ml
Fluid ounce (fl oz)	8 fl dr	1.8047	29.5729 ml
Gill (gi)	32 fl dr	7.2188	118.292 ml
Pint (pt)	4 fl oz		
	16 fl oz	28.875	.4732 ltr
	4 gi		
Quart (qt)	32 fl oz	57.75	.9463 ltr
	8 gi		
	2 pt		
Gallon (gal)	32 gi	231	3.7853 ltr
	8 pt		
	4 qt		

* Approximately one drop.

Dry Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Pint (pt)		33.6003	.5506 ltr
Quart (qt)	2 pints	67.2006	1.1012 ltr
Peck (pk)	16 pints	537.605	8.8095 ltr
	8 quarts		
Bushel (bu)	64 pints	2150.42	35.2383 ltr
	32 quarts		
	4 pecks		

COMMON FORMULAS

Cylinder: $V=\pi r^2h$, in which π is 3.14, the radius of the base, and h the height.

Cone: $V=\frac{\pi r^2h}{3}$, in which π is 3.1416, r the radius of the base, and h the height.

Sphere: $V=\frac{4\pi r^3}{3}$, in which π is 3.1416, r the radius.

Miscellaneous

Speed per second acquired by falling body: $v=32t$, in which t is the time in seconds.

Distance in feet traveled by falling body: $d=16t^2$, in which t is the time in seconds.

Speed of sound in feet per second through any given temperature of air:

$$V=\frac{1087\sqrt{273+t}}{16.52}$$

in which t is the temperature Centigrade.

Cost per hour of operation of electrical appliance: $C=\frac{Wtc}{1000}$, in which W is the number of watts, t the time in hours, and c the cost per kilowatt-hour.

Conversion of matter into energy (Einstein's Theorem): $E=mc^2$, in which E is the energy in ergs, m the mass of matter in grams, and c the speed of light in centimeters per second. ($c^2=9\cdot10^{20}$).

Abbreviations

The National Bureau of Standards recommends that the period be omitted after all abbreviations of units unless the

abbreviation forms an English word that the same abbreviation be used both singular and plural.

FAHRENHEIT AND CENTIGRADE SCALES

On the Fahrenheit scale represents temperature produced by the mixing of equal weights of snow and common salt.

Absolute zero is theoretically the lowest possible temperature, the point at which all molecular motion would cease.

	F	C
Freezing point of water	212°	100°
Boiling point of water	32°	0°
Absolute zero	-459.6°	-273.1°

To convert Fahrenheit to Centigrade, subtract 32 and multiply by 5/9.

To convert Centigrade to Fahrenheit, multiply by 9/5 and add 32.

ROMAN NUMERALS

Roman numerals are expressed by letters of the alphabet and are rarely used today except for formality or variety.

There are three basic principles for reading Roman numerals:

1. A letter repeated once or twice represents its value that many times. (XXX=30, CC=200, etc.).

2. One or more letters placed after another letter of greater value increases the value by the amount of the smaller. (LXX=70, MCC=1200, etc.).

3. A letter placed before another letter of greater value decreases the value by the amount of the smaller. (IV=4, XC=90, etc.).

Letter	Value	Letter	Value
I	1	LX	60
II	2	LXX	70
III	3	LXXX	80
IV	4	XC	90
V	5	C	100
VI	6	D	500
VII	7	M	1,000
VIII	8	V	5,000
IX	9	X	10,000
X	10	L	50,000
XX	20	C	100,000
XXX	30	D	500,000
XL	40	M	1,000,000
L	50		

SIMPLE INTEREST FOR \$100

To find the interest for any amount of time, move the decimal point of that amount two places to the left and multi-

ply by the figure obtained from the table.

For figuring simple interest, the year is considered to have 360 days.

	1 Day	7 Days	1 Month	3 Months	6 Months	1 Year
%	\$.00556	\$.03889	\$.16667	\$.50000	\$1.00000	\$2.00000
1/2%	.00694	.04861	.20833	.62500	1.25000	2.50000
3/4%	.00833	.05833	.25000	.75000	1.50000	3.00000
1%	.00972	.06806	.29167	.87500	1.75000	3.50000
1 1/4%	.01111	.07778	.33333	1.00000	2.00000	4.00000
1 1/2%	.01250	.08750	.37500	1.12500	2.25000	4.50000
1 3/4%	.01389	.09722	.41667	1.25000	2.50000	5.00000
2%	.01528	.10694	.45833	1.37500	2.75000	5.50000
2 1/4%	.01667	.11667	.50000	1.50000	3.00000	6.00000
2 1/2%	.01806	.12639	.54167	1.62500	3.25000	6.50000
2 3/4%	.01944	.13611	.58333	1.75000	3.50000	7.00000
3%	.02083	.14583	.62500	1.87500	3.75000	7.50000
3 1/4%	.02222	.15556	.66667	2.00000	4.00000	8.00000
3 1/2%	.02361	.16528	.70833	2.12500	4.25000	8.50000
3 3/4%	.02500	.17500	.75000	2.25000	4.50000	9.00000
4%	.02639	.18472	.79167	2.37500	4.75000	9.50000
4 1/4%	.02778	.19444	.83333	2.50000	5.00000	10.00000

MISCELLANEOUS UNITS

POINT: Originally a measurement of type (5 1/2 points). Now equal to 1/14 inch. Used in printing for measuring column width.

MICRON (A or λ): .0001 micron or .001 mm. Used for measuring length of light waves.

ASTRONOMICAL UNIT (A.U.): 93,003,000 miles, the average distance of the earth from the sun. Used in astronomy.

BALE: A large bundle of goods. In the U. S., the approximate weight of a bale of cotton is 500 pounds. The weight varies in other countries.

BARREL (bbl): For liquids, $31\frac{1}{2}$ gallons or 7326.5 cubic inches. For dry commodities, except cranberries: 105 dry quarts or 7056 cubic inches. For cranberries: 5826 cubic inches.

BOARD FOOT (fbm): 144 cubic inches (12 in. x 12 in. x 1 in.). Used for lumber.

BOLT: 40 yards. Used for measuring cloth.

CABLE: About 100 fathoms or 600 feet. Used for measuring lengths of cable.

CARAT (c): 200 milligrams or 3.086 grains troy. Originally the weight of a seed of the carob tree in the Mediterranean region. Used for weighing precious stones. Also a measure of the purity of gold alloy, indicating how many parts out of 24 are pure. Eighteen carat gold, for example, is $\frac{3}{4}$ pure.

CHAIN (ch): a chain 66 feet or one-tenth of a furlong in length, divided into 100 parts called links. One mile is equal to 80 chains. Used in surveying and sometimes called Gunter's chain.

CUBIT: 18 inches or 45.72 cm. Derived from distance between elbow and tip of middle finger.

ELL, ENGLISH: $1\frac{1}{4}$ yards or $1/32$ bolt. Used for measuring cloth.

FATHOM (fath): 6 feet or 1.8288 m. Derived from the distance to which a man can stretch his arms. Used for measuring cables and depths of water.

FREIGHT TON (also called MEASURE-MENT TON): 40 cubic feet of merchandise. Used for cargo freight.

GREAT GROSS: 12 gross or 1728.

GROSS: 12 dozen or 144.

HAND: 4 inches or 10.16 cm. Derived from the width of the hand. Used for measuring the height of horses at withers.

HOGSHEAD (hhd): 2 liquid barrels or 14.653 cubic inches.

HORSEPOWER: The power needed to lift 33,000 pounds a distance of one foot in one minute (about $1\frac{1}{2}$ times the power an average horse can exert). Used for measuring the power of steam engines, etc.

KNOT: Not a distance, but the rate of speed of one nautical mile per hour. Used for measuring speed of ships.

LEAGUE: Rather indefinite and varying measure, but usually estimated at 3 miles in English-speaking countries.

LIGHT-YEAR: 5,880,000,000,000 miles, the distance light travels in a year at the rate of 186,272 miles per second. (If an astronomical unit were represented by one inch, a light-year would be represented by about one mile.) Used for measurements in interstellar space.

LINK: One-hundredth of a chain or 7.92 inches. Used in surveying.

MAGNUM: Two-quart bottle. Used for measuring wine, etc.

MICRON (μ): .001 millimeter. Used for scientific measurements.

MIL: .001 inch. Used for measuring wire. The area of a cross-section of wire is usually expressed in circular mils, a circular mil being the area of a circle one mil in diameter. A wire one inch in diameter has a cross-section area of 1,000,000 circular mils.

MILLIMICRON ($m\mu$): .001 micron or .000001 mm. Used for scientific measurements.

NAUTICAL MILE (also called GRAPHICAL or SEA MILE): Equal to 1 minute or $1/21600$ of a great circle of the earth. Length varies in different countries. In Great Britain, it is 6080.2 feet or 1853.2 meters, and in the United States, it is 6080.2 feet or 1853.248 meters. The International Hydrographic Bureau proposed in 1929 a length of 1852 meters or 6076.097 feet, which has been adopted by several countries.

PARSEC: Approximately 3.26 light-years or 19.2 trillion miles. Term is combination of first syllables of *parallax* and *second*, and distance is that of imaginary star when lines drawn from it to the earth and sun form a maximum angle of parallax of one second ($1/3600$ degree). Used for measuring interstellar distances.

PI (π): 3.14159265+. The ratio of the circumference of a circle to its diameter. For practical purpose, the value is stated to four decimal places: 3.1416.

PICA: $\frac{1}{6}$ inch or 12 points. Used in printing for measuring column width, etc.

PIPE: 2 hogsheads. Used for measuring wine and other liquids.

POINT: .013837 (approximately $1/72$) inch or $1/12$ pica. Used in printing for measuring type size.

QUINTAL: 100,000 grams or 220.46 pounds avoirdupois.

QUIRE: Used for measuring paper. Sometimes 24 sheets but more often 25. There are 20 quires in a ream.

REAM: Used for measuring paper. Sometimes 480 sheets, but more often 500 sheets.

SCORE: 20 units.

SPAN: 9 inches or 22.86 cm. Derived from the distance between the end of the thumb and the end of the little finger when both are outstretched.

STONE: Legally 14 pounds avoirdupois in Great Britain.

TOWNSHIP: U. S. land measurement, almost 36 square miles. The south border is 6 miles long. The east and west borders, also 6 miles long, follow the main lines, making the north border at least less than six miles long. Used in surveying.

TUN: 252 gallons, but often larger. Used for measuring wine and other liquids.

DECIMAL EQUIVALENTS OF COMMON FRACTIONS

.5000	$\frac{1}{2}$	.0313	$\frac{3}{11}$	.2727	$\frac{9}{11}$	.5455
.3333	$\frac{1}{3}$	.0156	$\frac{4}{5}$	.8000	$\frac{7}{8}$	.8750
.2500	$\frac{1}{4}$	.6667	$\frac{4}{7}$	.5714	$\frac{7}{9}$	.7778
.2000	$\frac{2}{5}$	.4000	$\frac{4}{9}$	.4444	$\frac{7}{10}$	.7000
.1667	$\frac{2}{7}$	.2857	$\frac{4}{11}$	.3636	$\frac{7}{11}$	.6364
.1429	$\frac{2}{7}$	.2222	$\frac{5}{6}$	.8333	$\frac{7}{12}$	.5833
.1250	$\frac{2}{8}$	.1818	$\frac{5}{7}$	.7143	$\frac{8}{9}$	.8889
.1111	$\frac{3}{4}$	.7500	$\frac{5}{8}$	.6250	$\frac{8}{11}$	.7273
.1000	$\frac{3}{5}$	.6000	$\frac{5}{9}$	.5556	$\frac{9}{10}$	.9000
.0909	$\frac{3}{7}$	.4286	$\frac{5}{11}$	.4545	$\frac{9}{11}$	.8182
.0833	$\frac{3}{8}$	.3750	$\frac{5}{12}$	.4167	$\frac{10}{11}$	.9091
.0625	$\frac{3}{10}$	.3000	$\frac{6}{7}$	.8571	$\frac{11}{12}$	.9167

Handy Conversion Factors

Change	To	Multiply by
hectares	hectoliters	.4047
(U. S.)	hectoliters	.3524
feet	inches	.3937
feet	cubic meters	.0283
meters	cubic feet	35.3145
meters	cubic yards	1.3079
yards	cubic meters	.7646
	meters	.3048
(U. S.)	liters	3.7853
	grams	.0648
	grains	15.4324
	ounces avdp.	.0353
	acres	2.4710
eters	bushels (U. S.)	2.8378
	millimeters	25.4000
	centimeters	2.5400
ns	pounds ap or t	2.6792
ns	pounds avdp.	2.2046
ers	miles	.6214
	gallons (U. S.)	.2642
	pecks	.1135
	pints (dry)	1.8162
	plnts (liquid)	2.1134
	quarts (dry)	.9081
	quarts (liquid)	1.0567
	feet	3.2808
	yards	1.0936
tons	tons (long)	.9842
tons	tons (short)	1.1023
	kilometers	1.6093
eters	inches	.0394
avdp.	grams	28.3495
	liters	8.8096
(dry)	liters	.5506
(liquid)	liters	.4732
ap or t	kilograms	.3732
avdp.	kilograms	.4536
(dry)	liters	1.1012
(liquid)	liters	.9463
feet	square meters	.0929
meters	square feet	10.7639
meters	square yards	1.1960
yards	square meters	.8361
(long)	metric tons	1.0160
(short)	metric tons	.9072
	meters	.9144

Perfect Squares and Cubes, 1 to 2025

Number	Square root	Cube root	Number	Square root	Cube root
1	1	1	512	22.58	8
4	2	1.587	529	23	8.08
8	2.828	2	576	24	8.38
9	3	2.080	625	25	8.68
16	4	2.520	676	26	8.98
25	5	2.962	729	27	9.28
27	5.196	3	784	28	9.58
36	6	3.464	841	29	9.88
49	7	3.760	900	30	10.18
64	8	4.058	961	31	10.48
81	9	4.353	1000	32	10.78
100	10	4.648	1024	32	11.08
121	11	4.943	1089	33	11.38
125	11.180	5	1156	34	11.68
144	12	5.248	1225	35	11.98
169	13	5.556	1296	36	12.28
196	14	5.863	1331	37	12.58
216	14.7	6	1369	38	12.88
225	15	6.086	1444	39	13.18
256	16	6.399	1521	40	13.48
289	17	6.708	1600	41	13.78
324	18	7.013	1681	42	14.08
343	18.5	7	1728	43	14.38
361	19	7.312	1764	44	14.68
400	20	7.621	1849	45	14.98
441	21	7.928	1936	46	15.28
484	22	8.233	2025	47	15.58

Mean and Median

The mean, also called the average, of a series of quantities is obtained by finding the sum of the quantities and dividing it by the number of quantities. In the series 1,3,5,18,19,20,25, the mean or average is 13 —i.e., 91 divided by 7.

The median of a series is that point which so divides it that half the quantities are on one side, half on the other. In the above series, the median is 18.

The median often better expresses the common-run, since it is not, as is the mean, affected by an excessively high or low figure. In the series 1,3,4,7,55, the median of 4 is a truer expression of the common-run than is the mean of 14.

Chemical Elements

Atomic number	Element	Symbol	Atomic weight	Density gm/cc	Melting point °C.	Boiling point °C.	Valence	Number of isotopes†	Discoverer
1	Hydrogen	H	1.0080	0.07†	-259.14	-252.7	1	3	Cavendish
2	Helium	He	4.003	0.15†	<-272.2	-268.9	0	4	Ramsay
3	Lithium	Li	6.940	0.534	186.	>1200.	1	5	Arfvedson
4	Beryllium	Be	9.013	1.84	1350.	1500.	2	4	Vauquelin
5	Boron	B	10.82	2.535§	2300.	2500.	3	5	Gay-Lussac and Thénard; Davy
6	Carbon	C	12.011	2.25**	>3500.	4200.	2, 3 or 4	6	Prehistoric
7	Nitrogen	N	14.008	0.810†	-209.86	-195.3	3 or 5	6	Rutherford
8	Oxygen	O	16.0000	1.14†	-218.4	-183.00	2	6	Priestley
9	Fluorine	F	19.00	1.14†	-223.	-187.	1	4	Moissan
10	Neon	Ne	20.183	0.90035 (g/10°C. 760mm)	-248.67	-245.9	0	5	Ramsay and Travers
11	Sodium	Na	22.991	0.9287†	97.5	880.	1	6	Davy
12	Magnesium	Mg	24.32	1.741	651.	1110.	2	6	Davy
13	Aluminum	Al	26.98	2.699†	660.0	1800.	3	6	Wöhler
14	Silicon	Si	28.09	2.42**	1420.	2600.	4	6	Berzelius
15	Phosphorus	P	30.975	1.83 (white)	44.1	220.	3 or 5	6	Brand
16	Sulfur	S	32.066	2.0-1	112.8	444.6	2, 4 or 6	7	Prehistoric
17	Chlorine	Cl	35.457	1.507†	-101.6	-34.6	1, 3, 5 or 7	7	Scheele
18	Argon	A	39.944	1.423†	-189.2	-185.7	0	8	Rayleigh and Ramsay
19	Potassium	K	39.100	0.87	62.3	760.	1	8	Davy
20	Calcium	Ca	40.08	1.54	810.	1170.	2	10	Davy
21	Scandium	Sc	44.96	3.62 (10°C.)	1200.	2400.	3	8	Nilson
22	Titanium	Ti	47.90	4.5	1800.	>3000.	3 or 4	8	Gregor
23	Vanadium	V	50.95	5.69	1710.	3000.	2, 3, 4 or 5	8	Sefström
24	Chromium	Cr	52.01	6.92	1615.	2200.	2, 3 or 6	8	Vauquelin
25	Manganese	Mn	54.94	7.42	1260.	1900.	2, 3, 4, 6 or 7	6	Gahn
26	Iron	Fe	55.85	7.85-88	1535.	3000.	2, 3 or 6	8	Prehistoric
27	Cobalt	Co	58.94	8.9	1480.	2900.	2 or 3	9	Brandt
28	Nickel	Ni	58.71	8.60-90	1452.	2900.	2 or 3	11	Cronstedt
29	Copper	Cu	63.54	8.30-95	1083.	2300.	1 or 2	10	Prehistoric
30	Zinc	Zn	65.38	7.04-16	419.43	907.	2	12	Identified by Marggraf
31	Gallium	Ga	69.72	5.903	29.75	>1600.	2 or 3	11	Boisbaudran
32	Germanium	Ge	72.60	5.46	958.5	2700.	4	13	Winkler
33	Arsenic	As	74.91	5.73	814.	615.	3 or 5	11	Albertus Magnus
34	Selenium	Se	78.96	4.3-8	220.	688.	2, 4 or 6	14	Berzelius
35	Bromine	Br	79.916	3.12†	-7.2	58.78	1, 3, 5 or 7	15	Balard
36	Krypton	Kr	83.80	2.16†	-169.	-151.8	0	19	Ramsay and Travers
37	Rubidium	Rb	85.48	1.532	38.5	700.	1	16	Bunsen and Kirchhoff
38	Strontium	Sr	87.63	2.50-58	800.	1150.	2	16	Davy
39	Yttrium	Y	88.92	3.80	1490.	2500.	3	15	Gadolin
40	Zirconium	Zr	91.22	6.44	1700.	>2900.	4	12	Klaproth
41	Niobium*** (Columbium)	Nb	92.91	8.4	1950.	>3300.	3 or 5	10	Hatchett
42	Molybdenum	Mo	95.95	9.01	2620±10	3700.	2, 3, 4, 5 or 6	13	Hjelm
43	Technetium	Tc	99.*	11.487	2300.	.....	2, 3, 4 or 5	12††	Perrier and Segrè
44	Ruthenium	Ru	101.1	12.06	2450.	>2700.	3, 4, 6 or 8	13	Klaus
45	Rhodium	Rh	102.91	12.44	1955.	>2500.	3	10	Wollaston
46	Palladium	Pd	106.4	12.16 (20°C.)	1555.	2200.	2 or 4	13	Wollaston
47	Silver	Ag	107.880	10.503††	960.5	1950.	1	13	Prehistoric
48	Cadmium	Cd	112.41	8.648	320.9	767.	2	14	Stromeyer
49	Indium	In	114.82	7.28	155.	1450.	1 or 3	13	Reich and Richter
50	Tin	Sn	118.70	7.29	231.83	2260.	2 or 4	18	Prehistoric
51	Antimony	Sb	121.76	6.618	630.5	1380.	3 or 5	16	Early historic times
52	Tellurium	Te	127.61	6.25**	452.	1390.	2, 4, or 6	17	von Reichenstein
53	Iodine	I	126.91	4.94	113.5	184.35	1, 3, 5 or 7	18	Courtois
54	Xenon	Xe	131.30	3.52†	-140.	-109.1	0	23	Ramsay and Travers

Element	Symbol	Atomic weight	Density gm/cc	Melting point °C.	Boiling point °C.	Valence	Number of isotopes†	Discoverer	Date discovered
Cesium	Cs	132.91	1.873	26.	670.	1	18	Bunsen and Kirchhoff	1860
Barium	Ba	137.36	3.78	850.	1140.	2	17	Davy	1808
Lanthanum	La	138.92	6.5	826.	1800.	3	15	Mosander	1839
Cerium	Ce	140.13	6.9	770.	1400.	3 or 4	14	Klaproth; Berzelius and Hisinger	1803
Praseodymium	Pr	140.92	6.475	940.	3450.	3, 4 or 5	9	Auer von Welsbach	1885
Neodymium	Nd	144.27	6.96	840.	3300.	3	13	Auer von Welsbach	1885
Promethium	Pm	145.*	.....	.....	.....	3	12††	Marinsky and Glendenin	1945
Samarium	Sm	150.35	7.7-8	1350.	1900.	2 or 3	14	Boisbaudran	1879
Europium	Eu	152.0	5.24	1100.	1700.	2 or 3	12	Demarcay	1901
Gadolinium	Gd	157.26	7.95	1350.	3000.	3	13	Marignac	1880
Terbium	Tb	158.93	8.33	1400.	2800.	3 or 4	10	Mosander	1843
Dysprosium	Dy	162.51	8.56	1475.	2600.	3	10	Boisbaudran	1886
Holmium	Ho	164.94	8.76	1475.	2700.	3	7	Soret	1878
Erbium	Er	167.27	9.06	1475.	2600.	3	9	Mosander	1843
Thulium	Tm	168.94	9.34	1500.	2400.	3	6	Cleve	1879
Ytterbium	Yb	173.04	9.01	824.	1800.	3	10	Marignac	1878
Lutetium	Lu	174.99	9.74	1650.	3500.	3 or 4	8	Urbain	1907
Hafnium	Hf	178.50	13.3	1700.	3200.	4	11	Coster and von Hevesy	1923
Tantalum	Ta	180.95	16.6	2850.	4100.	3 or 5	9	Ekeberg	1802
Tungsten (Wolfram)	W	183.86	18.6-19.1	3370.	5900.	2, 4, 5 or 6	12	d'Elhuyar	1783
Rhenium	Re	186.22	20.53 (20°C.)	3000.	.....	4	7	Noddack and Berg	1925
Osmium	Os	190.2	22.5	2700.	5300.	2, 3, 4 or 8	13	Tennant	1804
Iridium	Ir	192.2	22.42	2350.	4800.	3 or 4	7	Tennant	1804
Platinum	Pt	195.09	21.37	1755.	4300.	2 or 4	9	De Ulloa	1748
Gold	Au	197.0	19.3††	1063.0	2600.	1 or 3	12	Prehistoric	....
Mercury	Hg	200.61	13.596†	-38.87	356.90	1 or 2	14	Prehistoric	....
Thallium	Tl	204.39	11.86	303.5	1650.	1 or 3	13	Crookes	1861
Lead	Pb	207.21	11.347††	327.5	1620.	2 or 4	15	Prehistoric	....
Bismuth	Bi	209.00	9.80	271.	1450.	3 or 5	17	Identified by Geoffroy	1753
Polonium	Po	210.	.....	.....	.....	..	19	Curie	1898
Radioactive	At	210.*	.....	470.	.....	1, 3, 5 or 7	15	Corson et al	1940
Radon	Rn	222.	9.739†	-71.	-61.8	0	12	Dorn	1900
Radium	Fr	223.*	.....	23.	.....	1	10	Perey	1939
Actinium	Ra	226.05	6.0	960.	1140.	2	7	Curie	1898
Protactinium	Ac	227.	.....	.....	.....	3	6	Debierne	1899
Thorium	Th	232.05	11.13	1845.	3000.	4	10	Berzelius	1828
Protactinium	Pa	231.	.....	.....	.....	5	9	Hahn and Meitner	1917
Uranium	U	238.07	18.7	1850.	3927.	3, 4 or 6	12	Klaproth	1789
Neptunium	Np	237.*	17.7	.....	.....	3, 4, 5 or 6	10†††	McMillan and Abelson	1940
Plutonium	Pu	242.*	.....	.....	.....	3, 4, 5 or 6	9†††	Seaborg et al	1940
Americium	Am	243.*	11.7	>850.	.....	3	6†††	Seaborg et al	1944
Curium	Cm	242.	.....	.....	.....	3	6†††	Seaborg et al	1944
Berkelium	Bk	249.*	.....	.....	.....	3 or 4	3†††	Seaborg et al	1950
Californium	Cf	249.*	.....	.....	.....	3	2†††	Seaborg et al	1950
Einsteinium	E	253.	.....	.....	.....	3	5†††	Ghiorso et al	1954
Fermium	Fm	255.	.....	.....	.....	3	1†††	Studier et al	1954
Mendelevium	Mv	256.*	.....	.....	.....	3	1†††	Ghiorso et al	1955
Nobelium	No	253	.....	.....	.....	3	1†††	Sw., Br., & Am.	1957

..... number of the isotope of longest known half-life.

* Different forms of the same element, having the same atomic number but different atomic weights.

††† Different isotopes given includes only those that are stable and natural occurring, excluding those marked ††.

† Amorphous. †† Graphite. ** Crystalline. ††† Compressed. ††† Cast. §§ Exact date doubtful.

1893 and died 1280. ††† Have been artificially produced. *** New name adopted by International Union of Pure and Applied Chemistry, replacing old name in parentheses. < Is less than. > Is greater than.

Figures in parentheses are tentative or theoretical. Quantities made of elements from 96 to 102 have been determined to establish melting points and similar facts.

Number of isotopes of each element is increased by discovery or by manufacture.

Scientific Inventions, Discoveries and Theories

Source: *Encyclopaedia Britannica.*

Inventions

- Adding machine, recording: William S. Burroughs, 1888.
- Airplane: Wilbur and Orville Wright, 1903.
- Air brake, railroad: George Westinghouse, 1868.
- Air pump: Otto von Guericke, 1650.
- Automobile: (Product of inventions of many men. Gottlieb Daimler is frequently given credit, c.1887.)
- Bakelite: Leo H. Baekeland, 1908.
- Balloon, hot-air: Joseph and Jacques Montgolfier, 1783.
- Barometer: Evangelista Torricelli, 1643.
- Camera, Kodak: George Eastman, 1888.
- Carburetor, spray: Charles E. Duryea, 1892.
- Cellophane: J. E. Brandenberger, 1911.
- Celluloid: John W. and I. S. Hyatt, 1870.
- Clock, pendulum: Christiaan Huygens, 1656.
- Converter, Bessemer: William Kelly, 1851. (Patent bought by Sir Henry Bessemer, who made a similar invention in 1856.)
- Cotton gin: Eli Whitney, 1793.
- Cyanide: Nikodem Caro and Adolf Frank, 1905.
- Cyclotron: Ernest O. Lawrence, 1931.
- Daguerreotype process: Louis J. M. Daguerre, 1839.
- Diesel engine: Rudolf Diesel, 1897.
- Dynamite: Alfred B. Nobel, 1862.
- Dynamo: Michael Faraday, 1831.
- Dynamo, industrial: Zénobe Gramme, 1872.
- Electromagnet: William Sturgeon, 1823.
- Electroplating: Luigi Brugnatelli, 1805.
- Elevator, passenger: Elisha G. Otis, 1857.
- Elevator safety device: Elisha G. Otis, 1852.
- Engine, high-speed internal-combustion: Gottlieb Daimler, 1885.
- Filament, tungsten: Irving Langmuir, 1915.
- Flying shuttle: John Kay, 1733.
- Food preservation, hermetically sealed (meat): François (Nicolas) Appert, 1810, with little success.
- Fountain pen: Lewis E. Waterman, 1884. (First successful one.)
- Frequency modulation (FM): Edwin H. Armstrong, 1933.
- Guncotton: Christian Schönbein, 1845.
- Gyrocompass: Elmer A. Sperry, 1905.
- Gyroscope: Léon Foucault, 1852.
- Helicopter: Igor I. Sikorsky, 1909; Louis C. Bréguet equipped first passenger carrying helicopter, 1909; first successful modern helicopter, Heinrich K. J. Focke, 1937-41.
- Hydroplane: Charles M. Ramus propounded idea around 1870; Glenn H. Curtiss, 1911.
- Jet propulsion (aircraft): Sir Frank Whittle, 1930.
- Lamp, electric incandescent: (Inventor uncertain; Thomas A. Edison, who made a lamp in 1879, is sometimes credited.)
- Lens, bifocal: Benjamin Franklin, c.1750.
- Lightning rod: Benjamin Franklin, 1752.
- Linotype machine: Ottmar Mergenthaler, 1885 (patent); first used, 1886.
- Lithography: Aloys Senefelder, 1796.
- Machine gun: Richard J. Gatling, 1862.
- Match, friction: John Walker, 1827.
- Mercury-vapor lamp: Peter C. Hewitt, 1902.
- Microscope, compound: Zacharias Janssen, 1590.
- Microscope, electron: Vladimir Zworykin et al., 1939.
- Miner's safety lamp: Sir Humphry Davy, 1815.
- Monotype machine: Tolbert Lanston, 1824.
- Motion pictures: Thomas A. Edison, 1889.
- Motion pictures, sound: (Product of various inventions. First picture with synchronized musical score: *Don Juan*, Warner Bros., 1926. First picture with spoken dialogue: *The Jazz Singer*, Warner Bros., 1927.)
- Motor, A-C: Nikola Tesla, 1892.
- Ophthalmoscope: Hermann von Helmholtz, 1851.
- Photograph: Thomas A. Edison, 1877.
- Photography, color: Gabriel Lippmann, 1891.
- Power loom: Edmund Cartwright, 1785.
- Printing, movable-type: Johann Gutenberg (?), c.1440.
- Printing press, rotary: Richard Hoe, 1829.
- Radar: Gregory Breit & Merle A. Tukey, 1925.
- Radio: (Product of various inventions. First practical system of wireless telegraphy: Guglielmo Marconi, 1895.)
- Radio telephone: Lee De Forest, 1906.
- Radio tube, diode: Sir John Ambrose Fleming, 1904.
- Radio tube, triode: Lee De Forest, 1906.
- Rayon: George Andemars (first patent), 1855; perfected by Sir Joseph Swan, 1883.
- Reaper: Cyrus McCormick, 1834.
- Revolver: Samuel Colt, 1835.
- Rifle, automatic: John M. Browning, 1898.
- Rubber, vulcanized: Ch. Goodyear, 1839.
- Screw propeller: John Ericsson, 1837.
- Self-starter, automobile: Charles F. Kettering, 1911.
- Sewing machine: Elias Howe, 1846 (patented). Idea of lock-stitch machine conceived independently by Walter T. Hunt, 1832-4.
- Spinning frame: Sir Richard Arkwright, 1769.
- Spinning jenny: James Hargreaves, 1764.
- Spinning mule: Samuel Crompton, 1779.
- Steamboat: Robert Fulton, 1807. (First commercially successful one in U.S. 1807.)

engine: James Watt, 1765. (First
ical one.)
military: Sir Ernest Swinton, 1914.
ph., electromagnetic recording:
el F. B. Morse, 1837.
one: Alexander Graham Bell, 1876.
pe: Hans Lippershey (?), c.1608.
on: Successful demonstration by
Baird in England and C. F. Jenkins
S., in early 1920's. (First commer-
TV: July 1, 1941, over WNBT, New
)
meter: Galileo Galilei, 1593.
neumatic: John B. Dunlop, 1888.
caterpillar: Benjamin Holt, 1900.
rmer, electric: Wm. Stanley, 1885.
tor: John Bardeen, William Shock-
nd Walter Brattain, 1948.
iter: First practical one invented by
topher Sholes, Carlos Glidden and
el W.-Soule in 1867; patented by
s in 1868.
a: Ferdinand von Zeppelin, 1900.

Discoveries and Theories

ine, isolation of: Jokichi Takamine,
um manufacture by electrolytic ac-
Charles M. Hall, 1886.
in, diphtheria: Emil von Behring,
mashing with slow neutrons: En-
Fermi, 1934. (Experiment repeated
se Meitner and Otto Hahn in 1938.)
numbers: Henry Moseley, 1913.
theory: John Dalton, 1803.
ycin: Benjamin M. Duggar, 1948.
l: Anton van Leeuwenhoek, 1683.
circulation of: William Harvey,
ation of plants and animals: Caro-
nnaeus, 1737-53.
tion, nature of: Antoine Lavoisier,
oned reflex: Ivan Pavlov, c.1910.
um (heavy hydrogen): Harold C.
1931.
ment of water, principle of:
nedes, 3rd century B.C.
agnetic waves: Heinrich Hertz,
: Sir Joseph J. Thomson, 1897.
, wave nature of: Louis Victor de
e, 1924.
rst used as anesthetic: Crawford
ng, 1842.
n by natural selection: Charles
n, 1859.
bodies, law of: Galileo Galilei,
aws governing: Joseph Gay-Lussac,
ion, law of: Sir Isaac Newton, 1687.
on sun: Sir Joseph Lockyer, 1868.
, laws of: Gregor Mendel, 1865.
n, electric: Joseph Henry, 1828.

Insulin: Sir Frederick G. Banting and J. J.
R. MacLeod, 1922.
Intelligence testing, modern: Alfred Binet
and Theodore Simon, 1905.
Isotopes, mass spectra of: Francis W.
Aston, 1919.
Isotopes, theory of: Frederick Soddy, 1912.
Light, electromagnetic theory of: James
Clerk Maxwell, 1873.
Light, velocity of: Olaus Römer, 1675.
Molecular hypothesis: Amadeo Avogadro,
1811.
Neutron: James Chadwick, 1932.
Ohm's Law: Georg S. Ohm, 1827.
Ozone: Christian Schönbein, 1839.
Penicillin: Sir Alexander Fleming, 1929.
Periodic table: Dmitri Mendeleev, 1869.
Positron: Carl D. Anderson, 1932.
Proton: Ernest Rutherford, 1919.
Psychoanalysis: Sigmund Freud, c.1904.
Quantum mechanics: Werner Heisenberg,
1925.
Quantum theory: Max von Planck, 1901.
Rabies preventive: Louis Pasteur, 1885.
Radioactivity: Antoine Becquerel, 1896.
Radioactivity, artificial: Frédéric and Irène
Joliot-Curie, 1934.
Relativity, theories of: Albert Einstein,
1905-53.
Salk antipolio vaccine: Jonas E. Salk, an-
nounced successful 1955.
Schick test of susceptibility to diphtheria:
Béla Schick, 1913.
Secretin, isolation of: Sir William Bayliss
and Ernest Starling, 1902.
Soda manufacture from salt: Ernest Sol-
vay, 1861.
Solar system, heliocentricity of: Nicolaus
Copernicus, 1530. (Also Aristarchus of
Samos, 3rd century B.C.)
Spectrum analysis: Robert Bunsen and
Gustav Kirchhoff, 1859.
Sulfa drugs as bactericides: Gerhard
Domagk, 1932.
Surgery, antiseptic: Sir Joseph Lister, 1867.
Tuberculosis bacillus: Robert Koch, 1882.
Vaccination: Edward Jenner, 1796.
Virus, crystalized: Wendell M. Stanley,
1935.
Vitamin A: Elmer V. McCollum and M.
Davis, 1912-14.
Vitamin B: Elmer V. McCollum, 1915-16.
Vitamin C: A. Holst and T. Froehlich, 1912.
Vitamin D: Elmer V. McCollum, 1922.
Vitamin D, irradiated: Harry Steenbock,
1924.
Wassermann test for syphilis: August von
Wassermann, 1906.
Water, synthesis of: Henry Cavendish,
1781.
Wilson Cloud Chamber: Charles T. R. Wil-
son, 1911.
X-rays: Wilhelm Roentgen, 1895.

Communicable Diseases

Source: Control of Communicable Diseases in Man, an official report of the American Public Health Association

Disease	Incubation period*	Period of communicability
Chickenpox (varicella).....	2 to 3 weeks	From 1 day before appearance of vesicles to 6 days after.
Common cold.....	12 to 72 hours; usually 24 hrs.	From 1 day before onset to 5 days after.
Conjunctivitis.....	1 to 3 days	During course of active infection.
Diphtheria.....	2 to 5 days	Usually 2 weeks or less; seldom more than 4 weeks.
Dysentery, amebic.....	3 to 4 weeks (varies widely)	During infection; possibly for years if untreated.
Food poisoning: Botulism.....	Within 18 hours	Not applicable.
Salmonella infection.....	6 to 48 hours in epidemics	3 days to 3 weeks (extremely variable).
Staphylococcus intoxication.....	½ to 4 hours	Not applicable.
German measles (rubella).....	14 to 21 days; usually 18	At least 4 days after onset of catarrhal symptoms.
Gonorrhea.....	3 to 9 days; sometimes longer	Indefinitely unless treated.
Impetigo contagiosa.....	2 to 5 days; sometimes longer	Until lesions are healed.
Influenza.....	Usually 1 to 3 days	Probably for brief time before and 1 week after onset.
Measles (rubeola).....	10 days (to onset) 14 days (to rash)	From 4 days before rash appears to 5 days after.
Meningitis, meningococcal.....	2 to 10 days	Usually 1 day after appropriate medication.
Mumps.....	12 to 26 days; commonly 18	From 7 days before distinctive symptoms up to 9 days after or until swelling subsides.
Pneumonia: Bacterial.....	Usually 1 to 3 days	Unknown.
Virus.....	Believed to be 7 to 21 days; commonly 12	Unknown.
Poliomyelitis.....	3 to 21 days; commonly 7 to 12	From late incubation to first few days after onset; in feces for 3 to 6 weeks or more.
Rabies (hydrophobia).....	2 to 6 weeks or longer	From animals, 3 to 5 days before onset and during course of the disease.
Rheumatic fever.....	Not applicable†	Not known to be communicable.
Scarlet fever and streptococcal sore throat.....	2 to 5 days	During incubation and clinical illness, about 10 days last for months in untreated patients.
Smallpox.....	7 to 16 days; commonly 12	From first symptoms to disappearance of scabs and a period of 2 to 3 weeks.
Syphilis.....	10 days to 10 weeks; usually 3 weeks	Variable and not definitely known.
Tetanus.....	4 days to 3 weeks	Not communicable from man to man.
Trichinosis.....	2 to 28 days after eating infected meat; usually 9 days	Not directly transmitted from man to man.
Tuberculosis.....	4 to 6 weeks (to primary phase)	As long as tubercle bacilli are discharged by patient.
Typhoid fever.....	1 to 3 weeks	As long as typhoid bacilli appear in excreta; 2 to 3 weeks after patients become permanent carriers.
Whooping cough (pertussis)....	Commonly 7 days, almost uniformly within 10 days, and not exceeding 21 days	From 7 days after exposure to 3 weeks after onset of paroxysms.

* Usual limits. † Usually precipitated by a previous infection.

Gestation, Incubation and Longevity of Certain Animals

Source: T. Donald Carter, American Museum of Natural History.

Animal	Gestation and incubation, in days & (average)	Longevity, in years & (record exceptions)	Animal	Gestation and incubation, in days & (average)	Longevity, in years & (record exceptions)
Ass.....	340-385	18-20 (46)	Kangaroo.....	c. 39	10-12
Bear.....	180-240*	15-20 (34)	Lion.....	105-111	10
Cat.....	52-65	10-12 (21)	Mare.....	304-419 (336)	20-25
Chicken.....	21	7-8 (14)	Monkey.....	149-179* (164)	12-15*
Cow.....	c. 280	9-12 (25)	Mouse.....	19-31*	1-3 (1)
Deer.....	140-250	10-15 (26)	Parakeet (Budgerigar).....	17-20 (18)	8
Dog.....	55-70 (63)	10-12 (24)	Pigeon.....	18	10-12
Duck.....	21-35* (28)	10 (15)	Rabbit.....	27-36 (31)	6-8
Elephant.....	515-760* (628)	30-40 (98)	Rat.....	21-30 (22)	3
Ewe.....	121-180*	12 (16)	Sow.....	101-130 (115)	10
Goat.....	135-163 (150)	12 (17)	Squirrel.....	28-35	8-9
Groundhog.....	28-35	4-7	Vixen (fox).....	51-60	8-10
Guinea pig.....	63-71	3 (6)	Whale.....	276-365*	.....
Hamster, golden.....	15-19	2	Wolf.....	63	10-12
Hippopotamus.....	220-255	30 (49+)	Woman.....	270+ or -	72

* Depending on kind. † Latest life expectancy charts list this age.

Calories and Vitamins of Selected Foods

Source: U. S. Dept. of Agriculture, Agriculture Handbook No. 8 (June 1950).

Food and (amount) ¹	Energy; calories	Vitamin A value, Int. Units	Vitamin B ₁ (thiamine), mg.	Vitamin B ₂ (riboflavin), mg.	Niacin; mg.	Vitamin C (ascorbic acid), mg.
medium R).....	76	120	.05	.04	.2	6
medium fat (2 sl. C).....	97	(0)	.08	.05	.8	0
1 medium R).....	88	430	.04	.05	.7	10
ap, green (1 cup C ²).....	27	830	.09	.12	.6	18
in ³ (3 oz. C).....	257	30	.06	.16	4.1	0
, diced (1 cup C).....	68	30	.03	.07	.5	11
e (1 sl.).....	57	0	.04	.02	.4	(0)
ite, enriched ⁴ (1 sl.).....	63	0	.06	.04	.5	(0)
holewheat (1 sl.).....	55	0	.07	.03	.7	(0)
(tbs.).....	100	460 ⁵	...	...	...	(0)
k: cultured ⁶ (1 cup).....	86	10	.09	.43	.3	3
1 cup R).....	24	80	.06	.05	.3	50
liced (1 cup C).....	44	18,130	.07	.07	.7	6
wiss (1 oz.).....	105	410	trace	(.11)	(trace)	(0)
ottage ⁶ (1 cup).....	215	(50)	.04	.69	(.2)	(0)
roasters ⁷ (4 oz. R).....	227	460	.09	.18	9.1	(0)
unsweetened (1 oz.).....	143	20	.01	.06	.3	(0)
r C).....	84	390 ⁸	.11	.10	1.4	8
graham (2 medium).....	55	(0)	.04	.02	.2	(0)
ght (½ pt.).....	489	1,980	.07	.34	.2	3
hed (1).....	77	540	.04	.12	trace	0
eat, enriched ⁹ (1 cup).....	401	(0)	.48	.29	3.8	(0)
(½ medium).....	75	20	.07	.04	.4	76
ked ³ (3 oz. C).....	339	(0)	.46	.18	3.5	0
r (3 oz. C).....	316	40	.07	.16	4.1	0
bs.).....	62	(0)	trace	.01	trace	1
(1/7 qt. brick).....	167	420	.03	.15	.1	1
roast ³ (3 oz. C).....	230	...	.12	.21	4.4	0
medium).....	20	0	.03	trace	.1	31
(3 oz. R).....	120	19,130	.18	2.65	13.7	30
enriched (1 cup PC).....	209	(0)	.24	.15	2.0	(0)
o (1 tbs.).....	101	460	...	...	...	(0)
, whole (1 cup).....	166	(390)	.09	.42	.3	3
cane, medium (1 tbs.).....	46	...	...	.02	.2	...
1 cup C).....	148	(0)	.22	.05	.4	(0)
medium).....	70	(290)	.12	.04	.4	77
1 cup R).....	200	770	.35	.48	2.8	...
medium R).....	46	880	.02	.05	.9	8
tter (1 tbs.).....	92	0	.02	.02	2.6	(0)
oasted, chopped (1 tbs.)...	50	0	.03	.01	1.5	(0)
n, immature (1 cup C).....	111	1,150	.40	.22	3.7	24
R).....	29	200	.04	.02	.3	3
3 (3 oz. C).....	284	(0)	.71	.20	4.3	0
white (1 cup mashed ¹⁰)...	159	50	.16	.10	1.7	14
nsulfured ¹¹ (1 cup C).....	310	2,210	.07	.20	2.0	2
nsulfured (1 tbs.).....	26	trace	.02	.01	trace	trace
e (1 cup C).....	201	(0)	.02	.01	.7	(0)
ak ³ (3 oz. C).....	197	20	.06	.19	4.7	0
ink canned (3 oz.).....	122	60	.03	.16	6.8	(0)
pork, canned (4 oz.).....	340	(0)	.23	.27	3.4	0
enriched (1 cup PC).....	218	(0)	.25	.15	2.1	(0)
cup C).....	46	21,200	.14	.36	1.1	54
nulated (1 tsp.).....	16	(0)	(0)	(0)	(0)	(0)
atoes (1 baked).....	183	11,410 ¹²	.12	.08	.9	28
(1 medium R).....	30	1,640	.08	.06	.8	35
medium fat (4 oz. R).....	304	...	.10	.16	9.1	(0)
liced (1 cup C).....	42	trace	.06	.09	.6	28
³ (3 oz. C).....	184	...	.07 ¹⁵	.24 ¹⁵	5.2 ¹⁵	0

W; C—cooked; PC—partially cooked. ² Cooked short time in small amount of water. ³ Boneless. ⁴ 4% milk solids. ⁵ Year-round average. ⁶ Made from skim milk. ⁷ Bone out. Thiamine, riboflavin and niacin added on muscle meat only. ⁸ Based on yellow corn; white corn contains only a trace. ⁹ Patent. ¹⁰ Vitaminized. ¹¹ Meat only. ¹² If very pale varieties only were used, value would be much lower. ¹³ Milk added. ¹⁴ Data assume cut to be prepared by braising or pot roasting. Use of proportionate quantity of water would add approximately 50% more thiamine and niacin and 25% more riboflavin. ¹⁵ Parentheses denote imputed values. The sign ... shows that no basis could be found for imputing a value, though there was some reason to believe that a measurable amount might be present.

Record Passages of Atlantic (Screw) Steamships since 1900

WESTWARD PASSAGES

Date	Ship and (flag*)	European port	Time			Speed knots	S. mi.
			D.	H.	M.		
1900,01	DEUTSCHLAND (G)	Southampton	5	11	54	23.15	3,000
1907	LUSITANIA† (B)	Queenstown	4	11	40	24.00	3,000
1910			4	11	40	25.88	3,000
1908	MAURETANIA† (B)	"	4	10	41	26.06	3,000
1911	" (B)	Cherbourg	4	21	44	26.9	3,000
1929	BREMEN† (G)	"	4	17	42	27.83	3,000
1929	EUROPA† (G)	"	4	17	6	27.91	3,000
1930	REX† (I)	Gibraltar	4	13	58	28.92	3,000
1933	NORMANDIE† (F)	Bishop's Rock	4	3	2	29.98	3,000
1935			4	0	27	30.14	2,900
1936	QUEEN MARY† (B)	"	3	21	48	30.99	2,900
1938			3	12	12	34.51	2,900
1952	UNITED STATES† (US)	Bishop's Rock	3	12	12	34.51	2,900

EASTWARD PASSAGES

1900,01	DEUTSCHLAND† (G)	Eddystone Lt.	5	7	38	23.51	3,000
1904	KAISER WILHELM II† (G)	Plymouth	5	8	16	23.58	3,000
1907	LUSITANIA† (B)	Queenstown	4	15	50	23.61	3,000
1910			4	15	50	25.57	3,000
1908	MAURETANIA† (B)	"	4	13	41	25.89	3,000
1911	" (B)	Cherbourg	5	1	49	26.25	3,000
1924	" (B)	Plymouth	4	17	50	27.22	3,000
1929			4	14	30	27.91	3,000
1929	BREMEN† (G)	Cherbourg	4	17	43	28.14	3,000
1933			4	16	15	28.51	3,000
1933	NORMANDIE† (F)	Bishop's Rock	4	3	25	30.35	3,000
1935			4	...	6	30.99	2,900
1937	QUEEN MARY† (B)	"	3	23	57	30.63	2,900
1936			3	20	42	31.69	2,900
1938			3	10	40	35.59	3,000
1952	UNITED STATES† (US)	Bishop's Rock	3	10	40	35.59	3,000

* (B)—British; (G)—German; (I)—Italian; (F)—French. † Vessels which have held the Blue Riband. Maritime Adm.

Largest Transatlantic Liners Calling at U. S. and Canadian Ports

Source: Trans-Atlantic Passenger Steamship Conference.

Line	Name of ship	Flag	Length, ft.	Tonnage	Pass.
American Export.....	Constitution; Independence ¹	United States	683	30,293	1,000
Canadian Pacific.....	Empress of Britain; Empress of England ¹	British	640	25,500	1,000
Cunard.....	Queen Elizabeth.....	British	1,031	83,673	2,000
	Queen Mary.....	British	1,019	81,237	1,000
	Mauretania.....	British	772	35,674	1,000
	Caronia.....	British	715	34,172	1,000
	Britannic.....	British	712	27,666	1,000
French.....	Liberté.....	French	937	51,839	1,000
	Flandre.....	French	594	20,464	1,000
Greek.....	Olympia.....	Liberian	616	22,980	1,000
Hamburg-Atlantic.....	Hanseatic.....	German	672	30,029	1,000
Holland-America.....	Rotterdam.....	Netherlands	748	38,645	1,000
	Nieuw Amsterdam.....	Netherlands	759	36,667	1,000
	Statendam.....	Netherlands	642	24,294	1,000
Home.....	Homeric.....	Panamanian	639	25,487	1,000
	Italia.....	Panamanian	608	21,663	1,000
Italian.....	Leonardo da Vinci.....	Italian	763	33,500	1,000
	Cristoforo Colombo.....	Italian	695	29,191	1,000
	Giulio Cesare; Augustus ¹	Italian	680	27,100	1,000
National Hellenic American.....	Queen Frederica.....	Greek	582	21,570	1,000
North German Lloyd.....	Bremen.....	German	700	32,336	1,000
Swedish American.....	Gripsholm.....	Swedish	631	23,190	1,000
	Kungsholm.....	Swedish	600	21,140	1,000
United States.....	United States.....	United States	990	53,330	1,000
	America.....	United States	723	33,961	1,000

¹ Sister ships.

PARLIAMENTARY PROCEDURE

by

Dan Golenpaul

Parliamentary procedures are rules for the conduct of a meeting in an orderly, democratic manner. Their purpose is to secure the rule by a majority and protect the rights of all members of an organization or assembly in meetings and in connection with all activities of the organization. The application of parliamentary rules is solely for this purpose.

Often, though, individuals employ these rules for a contest of wits. This practice can be interesting and the life of the group, but it can also be a nuisance and a field day for parliamentary pests. We agree to which this activity may be limited should be dictated by circumstances. A certain amount of indulgence is necessary because it is part of the nature of groups and is inevitably an expression of the egos that meet in a group.

Under no circumstances, however, should a chairman or members permit anyone to use the rules of procedure to trick and humiliate members or to impede the functioning of a meeting. To prevent these occurrences, a knowledge of parliamentary rules is important. We will do our best in the space permitted to impart a little knowledge. (But remember, a little learning is a dangerous thing.) What we are setting here should be adequate to take care of most situations in organizations made up of friendly people who want to conduct their business in an orderly, friendly manner.

It is necessary for you to be a member of a group that is involved in bitter disputes, then we advise that you go to technical and authoritative works on parliamentary procedure such as *Robert's Rules of Order*, *Cushing's Manual*, *Sturgis' Code of Parliamentary Procedure* and others. We also suggest that you go to meetings with a good lawyer and a good bat.

HOW TO FORM AN ORGANIZATION

People form or join organizations because they have a common interest or purpose that can best be advanced and attained through group activity. Whether the character of the organization be social, political, educational, communal, fraternal or athletic, its purpose and government are usually expressed in by-laws. They are not required to be elaborate, technical or legal.

BY-LAWS

By-laws should simply state the objects of the organization, the rights and duties of members, the qualifications of members, the number required to constitute a quorum, the dues, the necessary governing officers and how they should be elected, their terms of office, when meetings should be held and where, the order of business and, in the case of large and impersonal organizations, an authority for settling parliamentary disputes. (An organization usually adopts as its guide such works as mentioned heretofore.)

FIRST MEETING

At the first meeting of a group, temporary officers are chosen: a chairman, a secretary and a committee to prepare a draft of by-laws. The meeting is called to order by the member of the group who has assumed the leadership in the formation of the organization. He or she opens the meeting by the simple statement: "I now call the meeting to order," and asks the members to make nominations for chairman. When this announcement is made, members may ask for the floor by raising their hands, and, when recognized, offer a name in nomination. The person presiding can be nominated as can any other member present. Nominations require no seconding. A majority vote is necessary for the election of the chairman. The same procedure is required for the secretary and committee on by-laws.

The officers selected at the first meeting may serve until the next meeting or for a limited period, to be decided by a majority vote of the members present.

SECOND MEETING

At the second meeting, the report of the committee on by-laws is presented to the membership. The entire report may be accepted by a motion to adopt the report. A two-thirds vote is required. If the entire report is not acceptable to the membership, each provision may be considered separately; consideration consists of debating, amending, accepting or rejecting. The vote required on each provision is two-thirds of the membership present instead of the usual majority. Because by-laws are the fundamental basis of the organization, they should be acceptable to as many members as possible.

By-laws can be amended at any time during the life of the organization. Any proposals for changes in the by-laws require prior notice in writing to the entire membership before acting upon the proposed amendments at any meeting.

ELECTION OF OFFICERS

With the adoption of the by-laws providing for the type of officers for the organization, and the length of their terms, the organization proceeds to elect such officers. The usual officers for most groups are a president, vice-president, recording secretary, corresponding secretary, treasurer, sergeant at arms, and committees. Some have an executive secretary, a paid job, but an organization would have to be large to warrant a paid official.

All members are eligible for office when an organization is first formed. But later the by-laws may require a certain minimum period of membership as a qualification to hold office. Nominations are made by the simple statement: "I nominate so-and-so." The nominations do not require a second and a majority vote is necessary for election.

DUTIES OF OFFICERS

President: The president, as in government, is top man in an organization. Some organizations call this official "chairman." President sounds better, and is more appropriate when he performs not only the functions of presiding at meetings, but other duties in directing the organization. Chairman is the proper designation for one elected only to preside at a meeting.

Their duties as presiding officers are identical, regardless of title; they call the meeting to order, then present the order of business which the meeting is to act upon. They recognize members who desire the floor for a proposal or a discussion. They are supposed to see that everyone who wishes to speak has the opportunity, to do as little talking themselves as possible. The presiding officer has the right to take part in a discussion. When he declines, the vice-chairman should take the place until the presiding officer has concluded his talk.

A chairman is really a moderator. He directs, controls and regulates proceedings. He is neither a boss nor an antagonist. He is not to be regarded as such by the members. It is the chairman's primary job to keep the meetings moving smoothly. He should prevent members from abusing their privileges without interference. He should not curb their rights. The chairman must entertain all motions that are seconded and must restate them for the members. He must call for a vote on motions and declare the motion adopted or defeated on the basis of the vote. He should allow for a re-count or a roll call whenever requested to do so. When referring to himself, the presiding officer usually says: "The chair recognizes Mr. Blank" instead of "I recognize Mr. Blank."

The president or permanent chairman is usually an ex-officio member of all committees. Although he is not obligated to attend all meetings, he may if he so desires.

Secretary: The duties of a secretary are to keep the records of the organization, to record the minutes of the meetings, to handle the correspondence (unless the organization is large enough to require a corresponding secretary), such as notifying members of regular meetings or of a special meeting, reading the minutes at a meeting, etc.

The minutes of a secretary should include when the meeting was held, where it took place, who presided, what business was transacted, when the meeting adjourned, etc.

Treasurer: The treasurer's duties are to handle the funds of the organization, to collect the dues, to pay the bills w

zed, to keep the books for the or-
lon with records of income and
tures, and to render reports on
s at the regular meetings.

ant-at-Arms: The duties of the
t-at-arms are to assist the chair-
preserving order among the peo-
sent at a meeting, members and
to act as a sort of usher by check-
ple at the door to see that only
ntitled to be present at the meeting
itted, and to escort anyone out if
ed to do so by the chairman.

COMMITTEES

urpose of committees is to expe-
transaction of business on matters
quire more time than the meeting
or on matters that require time
estigation and special study. Com-
are essential in a large organiza-
ut are really not necessary for a
roup that can handle its limited
s at the regular membership meet-

ypes of committee may vary ac-
to the needs of an organization.
ding" committee has a fixed term
and gives continuous service. A
' committee serves temporarily to
ate and report on some special
or condition.

op committee in most organizations
executive committee, sometimes
p of the chairmen of the various
ees, sometimes selected from the
membership. Other committees
nbership committees, athletic com-
education committees, social or
committees, committees on finance,
ry committees to deal with a tem-
specific problem, etc.

ittes may be appointed by the
g officer, or be elected by the group,
g upon the by-laws. We think it
committees to be elected by the
ship. The chairman of the com-
s either designated by the presid-
er, elected by the committee, or is
on obtaining the most votes in the
Committees should consist of an
ber of members to assure a ma-
te and a minimum of stalemates.
s possible, the by-laws governing

the conduct of a meeting or organization
govern the committees as well.

Most committees are usually made up
of small groups and, therefore, their meet-
ings are less formal than regular organiza-
tion meetings. Motions do not require sec-
onding, speeches are not as restricted and
limited, and the chairman attending the
committee, or the president of the organi-
zation, if attending the committee meet-
ing, participates in the discussions on a
par with the other members.

Providing for numerous officers is a good
thing because it distributes responsibility
among more members. This is important
to keep in mind in connection with com-
mittees; while good people should be
placed on many committees, it is best and
advisable to have as many members on
committees as possible.

The committee chairman reports for the
committee to the general membership
meeting. Reports of the committee may
consist only of information requiring no
action or may contain recommendations
for certain action which is often the equiv-
alent of a proposed motion.

When there is a difference of opinion
among committee members, the majority
report offered is considered the committee
report. The dissenting members have the
right, however, to submit a minority re-
port proposing a different course of action.
Both reports must be heard or read at
the same meeting. No action on the ma-
jority report is in order until the minority
report is disposed of. It can be disposed
of in either of two ways. (a) Any member
may object to consideration of the minor-
ity report and such objection must be
voted on immediately without debate. If
carried, the minority report is dropped.
(b) If the objection to consideration is
not upheld, then a motion to substitute
the minority report for the majority report
is in order. If this motion is carried, the
majority report is eliminated and the mi-
nority report becomes the committee report
and is the only report before the body. If
the motion to substitute is not carried,
then the meeting proceeds to deal with
the majority report.

It is well to bear in mind that any re-
port or motion belongs to the membership.

If they are not satisfied with either report, they can dissolve the committee and act directly from the floor or appoint a new committee.

The chairman of the committee calls the meetings of the committee. If he fails or refuses to do so, or if he is absent, any two members of the committee may call a meeting. The chairman of a committee usually acts as its secretary.

If a committee fails to render a report on a matter referred to it within a reasonable time, the membership may force it to do so by drawing up a petition bearing the number of signatures required in the by-laws. This is called discharging a committee.

ORDER OF BUSINESS

The chairman calls the meeting to order. He must determine whether a quorum is present. The number of members required to constitute a quorum is stipulated in the by-laws, usually one more than half of the membership, or as low as one-tenth of the membership. Without a quorum, business cannot be legally conducted. The secretary reads the minutes of the previous meeting and they are adopted, perhaps with corrections, or as read. Officers and committees make any reports they have. Old business left over from the previous meeting is transacted. New business is brought up, discussed and acted upon. At the close, the chairman says that he will entertain a motion for adjournment.

RULES OF DEBATE

The presiding officers should first recognize the mover of a proposal, or the member of a committee presenting a report, and should try to alternate recognition between those favoring and those opposing a proposition. Any member is entitled to speak on the main question and on each amendment as presented. He must confine himself to the question under consideration, must avoid personalities, and must not accuse others of ill motives. In some groups the by-laws limit each speaker to a fixed number of minutes. The meeting may vote to extend the time of a speaker if it so desires. Debate can only be halted by a motion for the previous question and a two-thirds vote is required.

VOTING RULES

There are several methods of taking a vote. The simplest is by voice—"ayes" and "noes." This may be challenged by a member who thinks that the chairman has not heard correctly, in which case the vote is taken by a show of hands, or by standing. Roll call votes, recorded by the secretary, are required in some instances. A closed ballot (written votes) also is commonly used, especially in the election of officers. Only attending members may vote, unless the by-laws specifically permit proxy voting. A tie vote defeats a motion. The chairman is allowed to break a tie, though if he has not previously voted. Some organizations permit a chairman to vote only in case of a tie, while others allow him to vote as a regular member.

A majority vote is generally required to pass ordinary motions or to adopt ordinary actions. There are certain motions which require a two-thirds vote of those present. These generally include the following: amendments to the by-laws, to take up a question out of its proper order, to suspend the rules, to support or object to the consideration of a question, to take up the previous question, to limit debate, to expel a member or officer, to discharge a committee, or to refer a question to a committee. No vote can be taken unless unanimous if even one member presents an objection.

WHAT HAPPENS TO A MOTION

A motion is a proposal for action by the organization. It is made by any member who asks the chair for the floor and is properly recognized. Most motions require a second before being placed before the group. Not more than one main motion may be considered at a time. The procedure is simple. One merely says, "I move the following." The chairman then asks if anyone seconds the motion. If it is properly seconded, the chairman announces that the motion has been made and seconded, opens for a discussion and repeats the motion on request. A motion may be voted on without discussion, but discussion is required if requested by any member.

A motion causes many things to happen. It provokes debate, suggests modification,

the thinking and expresses the opinion of the group on a question. Once a motion is presented to the membership, it is up to them to treat and dispose of it in one of several ways and can only be withdrawn with the consent of the membership.

A motion may be amended. This means the motion may be modified or qualified by adding, substituting, or eliminating whole or part paragraphs. These changes must be relevant to the main motion.

For example, a motion is made for the membership to publish a magazine and the amendments are (a) the publication to be a weekly, (b) to have two editors, (c) to pay the members \$1.00 a year, etc. This motion may be amended as follows: (a) substitute "weekly" for "monthly," (b) provide salaries for the two editors, (c) eliminate the dollar charge for the members. All these amendments are in order because while the original motion was amplified or qualified by the amendments, the proposal for publishing a magazine still prevails.

Amendments that are irrelevant are not in order, such as an amendment requiring the editors to watch television. This is improper (perhaps for other reasons) because it is extraneous to the main purpose of proposing the publication of a magazine.

Amendments that negate the purpose of the motion, such as a proposal that the membership should not publish a magazine, are out of order because if the membership is entirely opposed to the idea, it is against the main motion or disposes of it in other parliamentary ways.

Important rules governing amendments:

There is no limit to the number of amendments that may be offered, but each amendment must be disposed of before a new one may be proposed.

After all amendments have been acted upon, the meeting votes on the main motion, and the amendments adopted are incorporated in the main motion.

Amendments require a majority vote for passage.

A rejected amendment may not be re-introduced in identical form and no amend-

ment may be offered reversing an amendment previously adopted.

This is not all that can happen to a motion. In addition to amendments to the motion, you are also permitted to make amendments to the amendments. For example, the original motion stipulates that the magazine should have two editors. An amendment provides that the editors be paid salaries. This amendment can be amended to provide what the salary should be.

Now, if you are thinking of whether you can amend the amendment to the amendment, the answer is "No." Although this has really gone far enough, there is something else you are allowed to do, for better or worse, and that is to introduce a substitute for the motion itself or for any of the amendments or for everything that has been proposed on the question. The substitute for an amendment does not modify the amendment, but replaces it and is subject to the same rules that apply to amendments.

When amendments pile up to the point of confusing the membership, resorting to a substitute for the entire proposition may be helpful. The best way to do this, under the circumstances, is for someone to move to have a special committee designated to prepare a substitute motion for the whole.

If the motion is adopted, the committee-elect should withdraw from the meeting to try to reconcile any contradictions contained in the motion or the amendments. It should bring forth a clear substitute that expresses the intentions of most of the proposals.

Let us not lose sight of the fact that the purpose of a motion is not to create an endless chain of acts, but to get something done. In this connection, it is well to bear in mind that the motion and amendments do not necessarily conflict and that the proposer of a motion may accept the amendments without discussion or vote.

Motions that cannot be amended: These include such motions as questions of order or appeal, objections to consideration of the question, or motions to adjourn, to call for the order of the day, to vote, to withdraw a motion, to take up a question out

of proper order, to suspend the rules, to table, to take from the table, to reconsider, to consider the previous question, to postpone indefinitely, to amend an amendment, or to nominate. Motions to postpone indefinitely, to limit debate, or to recess can be amended as to time only.

DELAYING OR CANCELING CONSIDERATION OF A MOTION

It is not binding on a meeting to deal with a motion at the time it is proposed. On the contrary, the membership has the choice of postponing or renewing consideration of a motion. Here are some of the ways to attain such objectives.

Objection to consideration: Consideration of any issue may be stopped before discussion begins on the question, even though it involves interrupting the speaker, by objecting to its consideration. This objection may be made by any member and does not require a second. Objection to consideration calls for an immediate vote without debate or amendment and requires a two-thirds vote. If carried, the motion is dropped for all time. The purpose of the act is to prevent the meeting from dealing with a question that may be offensive. This reason should be primary. Other reasons may be that it might waste the time of the meeting or it may be inappropriate to deal with the question at the time. This action is very drastic and should not be employed to gag any member except the village idiot at his worst.

Motion to postpone indefinitely: This is a polite way of killing a motion, at least for the moment. It differs from "Objection to consideration" insofar as the motion to postpone indefinitely and the motion itself are debatable and cannot be made while a member has the floor. This motion requires a second and calls for a majority vote. It cannot be amended and cannot be brought up again.

Motion to "lay on the table": If the meeting does not want to consider the motion at all, the procedure is to make a motion to "lay the question on the table." This suspends consideration of the main motion and amendments until such time

as the group chooses to take it up again, which can be later at the same meeting after other business has been transacted or at any subsequent meeting. This motion must be seconded, requires a majority vote, may not be debated or amended, and cannot be postponed. The only way to bring the motion back is to move to "take it off the table."

Motion to postpone to a definite time: This is an expression of the will of the meeting to put off consideration of a proposal until later in the same session or until a subsequent meeting. The object of such an act is to delay consideration of a question until more members are present or to enable members to acquire further information before making their decision. This motion is debatable only as to the advisability of postponement. The substance of the motion is not debatable. It is open for amendment as to time only and requires a majority vote.

Motion to refer to a committee: This is usually done if a meeting feels that a question requires more time and information before it acts upon it. A motion to refer to a committee names an existing committee or creates a special committee for its consideration and may be accompanied by instructions. Seconding and a majority vote are required for passage of this motion. It can be debated only as to the desirability and advisability of referring it to the committee. It cannot be amended only as to the nature of the committee and as to the instructions.

HOW TO REOPEN A QUESTION

To avoid finality of decisions that may be harmful to the best interests of the members, certain actions previously taken by the members are subject to review and reconsideration. Such review may apply to matters acted upon, matters postponed, or matters delegated to committees.

Motion to reconsider: This deals with something acted upon by a meeting when the members would like to reconsider it at another time during the same meeting. It is a motion that should be made by a member who has voted with the majority, whether in the affirmative or the negative, and

because the voter has changed his mind on the matter in the light of new information. Very often a member deliberates for or against motions so that he can move for reconsideration of the motion later in the meeting when there is a better chance for passing or rejecting the motion because more members are present, or because he will have more opportunity to persuade other members to change their votes. This is both good parliamentary procedure and democratic. A motion to reconsider requires a second, a majority vote, is debatable and cannot be amended. If a motion to reconsider is made after the question is before the assembly and the motion has original parliamentary status. Motions that cannot be reconsidered include: a motion to take from the table, to lay on the table, or a motion for indefinite postponement that has been defeated.

Motion to take from the table: This motion allows a group to take up a subject that has been set aside by a motion to table it at a previous meeting. This resumption of consideration on a question rates priority over other motions and can be introduced whenever there is no other business before the assembly. A motion to take a question from the table requires a second and a majority vote, is debatable and cannot be amended.

Motion to rescind: This motion enables the membership to re-evaluate some action taken in the past because it may have been taken without full understanding of the circumstances at that time. The point of order that a previous act of an organization does not apply to any legally binding action of the organization, nor to the election of members or officers. This motion calls for a second and majority vote and the original motion involved requires a two-thirds vote. It is debatable and cannot be amended.

Important techniques for keeping order: Important techniques for keeping order about proceedings, preventing abuses and protecting the rights of members, correcting errors, and expediting business at hand, are:

Motion for the Previous Question: This asks that the discussion be stopped at once on the question before the body. A move for the previous question cannot interrupt the speaker. It requires a second, is not de-

batable, cannot be amended, and requires a two-thirds vote. Its purpose is to say "Let's stop talking and vote."

Point of Information: This is a method of obtaining information about what is occurring through the medium of the chairman or the speaker. This interruption request is permissible even when one is speaking. It is unusual for the speaker or the chair to ignore such a request. Since it is intended only to secure information, it is not proper to use this as a device to make a statement or delay proceedings.

Point of Order: This questions the correctness of any action at the time it occurs. The only time that a point of order can be employed *after* an action has taken place is if it involves a violation of by-laws, constitution, or the law. It is raised on the basis of a mistake or omission in procedure, of a violation of the rules of the organization, of decorum in debate, or of irrelevancy of debate and procedure. A point of order needs no seconding, cannot be amended and requires no vote.

A point of order may be raised by any member at any time. It is in the nature of a demand addressed to the chair, which is required to act immediately on the point of order raised. The procedure is as follows: A member announces, "I rise to a point of order." This automatically halts any discussion or action until the chairman rules on the point of order. If the chairman concurs, he announces that the point of order was well taken, and proceeds to correct whatever is in question.

Appeal: If any other member takes exception to this ruling, he may appeal from the decision of the chair. Another basis for an appeal may result when the chair declares the point of order not well taken. This appeal is usually made by the person raising the point of order. All appeals require a second, are debatable and are subject to a majority vote of the membership. If they vote for the appeal, the chairman's decision is reversed. If they vote against the appeal, the chairman's decision is upheld. In the event of a tie vote, the chairman is sustained. If the chairman is a member of the organization, he has the right to vote and may make the tie.

Discussions on some appeals are not customary, such as questions of indecorum, violation of rules of speaking, or order of business.

Sometimes the chairman is in doubt on a point of order. When he is, he may defer to someone present for advice, or ask the members to discuss and vote on the point of order. This is the only time that a point of order is debatable. Their vote determines the chairman's decision.

Motion to adjourn: This motion is in order at any time, but should be employed with discretion. Obviously, it should not interfere with the organization's efforts to get business done. This motion requires a second, is not debatable, cannot be amended, and must be voted on immediately. A majority vote is necessary. Any motion for adjournment that refers to a specific time or place for the next meeting is subject to debate and amendment.

We have tried to project the reader into actual participation in the forming of an organization and the conduct of a meeting, and we have given more attention to the processes than to the discussion of technical rules. In following this course, we may have omitted some matters that do not occur at every meeting, but that do happen occasionally and should be understood.

Removal of officers: This is sometimes an unhappy necessity. Misconduct of an officer may involve neglect of duties, abuse of privileges, or incompetence. The removal of an officer is accomplished by preferring charges which should be of a serious nature and supported by proof. The charges may be considered at a general meeting or referred to a committee to investigate and to recommend a course of action. A two-thirds vote of the members present is required to remove an officer. A motion to remove an officer is debatable.

Expulsion of members: If a member violates his obligations and duties or is involved in an act that may bring disrepute to the organization, he is subject to charges and a hearing before a committee or the membership and can be expelled by a two-thirds vote. This action is debatable. Obviously, such actions should not be undertaken unless the charges are serious and

supported by substantial proof. It would be deplorable if the exercise of such a drastic action were based on a frivolous issue or personal bias. Sometimes the behavior of a member at a meeting requires disciplinary action in the form of a motion for immediate expulsion. This is not debatable and requires a two-thirds vote.

Question of privilege: A member may interrupt a meeting at any time to raise a question involving the comfort or convenience of the membership. It may concern such matters as the physical condition of the meeting hall, the seating of members, the conduct of persons present, or the ability to hear speakers. This request requires no second, is not debatable, cannot be amended and is decided by the chairman.

Suspension of the rules: The object of a proposal to suspend the rules is to permit a meeting to do something that is ordinarily prohibited by the rules of parliamentary procedure or by the adopted order of business. The suspension of rules is generally employed to deal with an emergency or special condition, such as permitting a guest speaker to start earlier than scheduled or allowing for the interruption of the regular order of business by a visiting committee. There are other circumstances under which the suspension of rules is permitted, but these cases are too complicated to be treated here. This motion cannot interrupt a speaker, requires a second, cannot be debated or amended and requires a two-thirds vote.

We have endeavored to outline some of the basic rules for the benefit of the many people who want some simple knowledge of how to form an organization, how to conduct a meeting, or how to participate in one; also to help spectators at a convention understand what is going on. Beyond this, we refer you to the authorities on parliamentary procedure.

However important rules are for guidance in most human activities, there is no doubt that much is accomplished through informal discussion and action, and we do not hesitate to urge small friendly groups to conduct their business with as little formality as few restrictions as possible. If this does not always work, we hope our book is able to serve you.

CROSSWORD PUZZLE GUIDE



Since most persons who can read and write occasionally or frequently indulge the indoor pastime of working crossword puzzles, this section is offered as a handy help to solvers who may be stumped for a two-letter word meaning "three-toed sloth" or a three-letter word meaning "native of Mindanao."

We have those two words here, and plenty more. We have the Greek, Roman, Norse and Egyptian deities of myth and legend. And we have those "Greek letters" and "months of the Jewish year" so often needed to fill out little gaps.

The reader is warned that in mythology there are many confusing and even conflicting accounts of the identities and adventures of the various gods, goddesses and lesser figures. There is also considerable variation in the spelling of names, places and things. For instance, you may spell it ICON, IKON or EIKON, and similar options are plentiful all along the crossword line. If the reader will keep further possible variations in mind, it may help at a critical point.

Various other sections of our book will be found of use to the crossword puzzler—especially the section of world geography and statistics. See Geography in the index.

First Aid to Crossword Puzzlers

Do not, of course, begin to list all the odd words you will meet with in your daily and Sunday crosswords, for such words run into many thousands. But we have tried to include those which turn up frequently, as well as many others which should be of help to you when you are unable to guess.

We do not guarantee that the definitions in your puzzle will be exactly the same as ours, although we have checked every word with a standard dictionary and have followed its definition.

In every case, we have used as the key word the principal noun of the definition, rather than the adjective, adjective phrase, or noun used as an adjective. And, to simplify your searching, we have listed the words according to the number of spaces you have to fill.)

Words of Two Letters

DA	From the (French), DU	Month: Jewish, AB
French, Latin), ET	God: Babylonian, EA, ZU	Mouth, OS
(Arabic), AL	Egyptian sun, RA	Mulberry: Indian, AL
ch), LA, LE, UN	Hindu unknown, KA	Native: Burmese, WA
ish), EL, LA, UN	Semitic, EL	Note: Of Scale, DO, FA, MI,
(French), AU	Goddess: Babylonian, AI	LA, RE, TI
ish), AL	Greek earth, GE	Of (French, Latin, Spanish),
LO	Gold (heraldry), OR	DE
Hawaiian, OO	Gulf: Arctic, OB	Of the (French), DU
ce: Abraham's, UR	Heart (Egy. relig.) AB	One (Scotch), AE
S	Indian: South American,	Pagoda: Chinese, TA
FO	GE	Plant: East Indian fiber, DA
y: Peacock, IO	King: Of Bashan, OG	Ridge: Sandy, AS, OS
gne, AY	Language: Artificial, RO	River: Russian, OB
NU	Assamese, AO	Sloth: Three-toed, AI
Burmese, BO	Lava: Hawaiian, AA	Soul (Egy. relig.), BA
Roman, AS	Letter: Greek, MU, NU, PI,	Sound: Hindu mystic, OM
se, AT	XI	Suffix: Comparative, ER
ing, RE	Hebrew, HE, PE	The. See Article
Chinese, WU	Lily: Palm, TI	To the: French, AU
(Egy. relig.), KA	Measure: Annamese, LY	Spanish, AL
Japanese, NO	Chinese, HO, HU, KO, LI,	Tree: Buddhist sacred, BO
mb. form), OO	MU, PU, TO, TU	Tribe: Assamese, AO
OS	Japanese, GO, JO, MO, RI,	Type: Jumbled, PI
otch), EE	SE, TO	Weight: Annamese, TA
Amplification, MU	Metric land, AR	Chinese, LI
Greek), NU	Netherlands, EL	Danish, ES
arplike, ID	Portuguese, PE	Japanese, MO
OD	Siamese, WA	Roman, AS
Greek), MU	Swedish, AM	Whirlwind: Faeroe Is., OE
French, Latin, Span-	Type, EM, EN	Yes (German), JA
, DE	Monk: Buddhist, BO	(Italian, Spanish), SI
prefix), AB		(Russian), DA

Words of Three Letters

- Adherent, IST
 Again, BIS
 Age, ERA
 Antelope: African, GNU, KOB
 Apricot: Japanese, UME
 Article (German), DAS, DEM, DEN, DER, DES, DIE, EIN
 (French), LES, UNE
 (Spanish), LAS, LOS, UNA
 Banana: Polynesian, FEI
 Barge, HOY
 Bass: African, IYO
 Beak, NEB, NIB
 Beard: Grain, AWN
 Beetle: June, DOR
 Being, ENS
 Berry: Hawthorn, HAW
 Beverage: Hawaiian, AVA
 Bird: Australian, EMU
 Crowlike, JAY
 Extinct, MOA
 Fabulous, ROC
 Frigate, IWA
 Parson, POE, TUE, TUI
 Sea, AUK
 Blackbird, ANI, ANO
 Born, NEE
 Bronze: Roman, AES
 Bugle: Yellow, IVA
 By way of, VIA
 Canton: Swiss, URI
 Cap: Turkish, FEZ
 Catnip, NEP
 Character: In "Faerie Queen," UNA
 Coin: Afghan, PUL
 Albanian, LEK
 British Gulana, BIT
 Bulgarian, LEV, LEW
 French, ECU, SOU
 Indian, PIE
 Japanese, SEN, YEN
 Korean, WON
 Lithuanian, LIT
 Macao, Timor, AVO
 Palestinian, MIL
 Persian, PUL
 Peruvian, SOL
 Rumanian, BAN, LEU, LEY
 Scandinavian, ORE
 Siamese, ATT
 See also Money of account
 Collection: Facts, ANA
 Commune: Belgian, ANS, ATH
 Netherlands, EDE, EPE
 Community: Russian, MIR
 Constellation: Southern, ARA
 Contraction: Poetic, EEN, EER, OER
 Covering: Apex of roof, EPI
- Crab: Fiddler, UCA
 Crag: Rocky, TOR
 Cry: Crow, rook, raven, CAW
 Cup: Wine, AMA
 Cymbal: Oriental, TAL, ZEL
 Disease: Silkworm, UJI
 Division: Danish territorial, AMT
 Geologic, EON
 Doctrine, ISM
 Dowry, DOT
 Dry (French), SEC
 Dynasty: Chinese, CHI, HAN, SUI, WEI, YIN
 Eagle: Sea, ERN
 Earth (comb. form), GEO
 Egg: Louse, NIT
 Eggs: Fish, ROE
 Emmet, ANT
 Enzyme, ASE
 Equal (comb. form), ISO
 Extension: building, ELL
 Far (comb. form), TEL
 Farewell, AVE
 Fiber: Palm, TAL
 Finial, EPI
 Fish: Carplike, IDE
 Pikelike, GAR
 Flatfish, DAB
 Fleur-de-lis, LIS, LYS
 Food: Hawaiian, POI
 Formerly, NEE
 Friend (French), AMI
 Game: Card, LOO
 Garment: Camel-hair, ABA
 Gateway, DAR
 Gazelle: Tibetan, GOA
 Genus: Ducks, AIX
 Grasses, POA
 Grasses (maize), ZEA
 Herbs or shrubs, IVA
 Lizards, UTA
 Rodents (incl. house mice), MUS
 Ruminants (incl. cattle), BOS
 Swine, SUS
 Gibbon: Malay, LAR
 God: Assyrian, SIN
 Babylonian, ABU, ANU, BEL, HEA, SIN, UTU
 Irish sea, LER
 Phrygian, MEN
 Polynesian, ORO
 Goddess: Babylonian, AYA
 Etruscan, UNI
 Hindu, SRI, UMA, VAC
 Teutonic, RAN
 Governor: Algerian, DLY
 Turkish, BEY
 Grampus, ORC
 Grape, UVA
 Grass: Meadow, POA
 Gypsy, ROM
 Hall, AVE
 Hare: Female, DOE
- Hawthorn, HAW
 Hay: Spread for drying, Y
 Herb: Japanese, UDO
 Perennial, PIA
 Used for blue dye, WA
 Herd: Whales, GAM, POI
 Hero: Spanish, CID
 High (music), ALT
 Honey (pharm.), MEL
 Humorist: American, AL
 I (Latin), EGO
 I love (Latin), AMO
 Indian: Algonquian, P
 SAC, WEA
 Chimakuan, HOH
 Keresan, SIA
 Mayan, MAM
 Shoshonean, UTE
 Siouan, KAW, OTO
 South American, I
 ONA, URO, URU, Y
 Tierra del Fuego, ONA
 Wakashan, AHT
 Ingot, PIG
 Inlet: Narrow, RIA
 Island: Cyclades, IOS
 Dodecanese, COS, KOS
 (French), ILE
 River, AIT
 Jackdaw, DAW
 John (Gaelic), IAN
 Keelbill, ANI, ANO
 Kiln, OST
 King: British legendary, LUD
 Kobold, NIS
 Lace: To make, TAT
 Lamprey, EEL
 Language: Artificial, IDO
 Bantu, ILA
 Siamese, LAO, TAI
 Leaf: Palm, OLA, OLE
 Leaving, ORT
 Left: Cause to turn, HA
 Letter: Greek, CHI, PHI, PSI, RHO, TAU
 Hebrew, MEM, NUN, S
 TAV, VAU
 Lettuce, COS
 Life (comb. form), BIO
 Lily: Palm, TOI
 Lizard, EFT
 Louse: Young, NIT
 Love (Anglo-Irish), GRA
 Lute: Oriental, TAR
 Macaw: Brazilian, ARA
 Marble, TAW
 Match: Shooting (French), TIR
 Meadow, LEA
 Measure: Abyssinian, TA
 Algerian, PIK
 Annamese, GON, M
 NGU, QUO, SAC, T
 TAT
 Arabian, DEN, SAA

n, VAT
 rian, OKA, OKE
 se, FEN, TOU, YIN
 ELL
 s, OKA, OKE, PIK
 , LAN, SAH
 h, FOD, MIL, POT
 an Republic, ONA
 , old, AAM
 ndian, KIT
 an, APT, HEN, PIK,
 3
 ic, MHO, OHM
 y, ERG
 h, PIN
 an, TUN
 n, POT
 n, AAM
 PIK
 w, CAB, HIN, KOR,
 rian, AKO
 dic, FET
 , GAZ, GUZ, JOW,
 ese, BOO, CHO,
 , RIN, SHO, SUN,
 ar, ADY
 land, ARE
 lands, KAN, KOP,
 D, VAT, ZAK
 ghan, FOT, POT
 n, GAZ, GUZ, MOU,
 ZER
 CAL
 on, DHA, LAN
 A, PES, URN
 n, FUT, LOF
 , COP
 e, KEN, NIU, RAI,
 SEN, SOK, WAH,
 land, TOP
 h, PIE
 Settlements, PAU,
 h, ALN, FOT, MIL,
 TUM
 POT
 an, SAA
 h, OKA, OKE, PIK
 MIL
 berg, IMI
 LEA
 avian, OKA, RIF
 C
 AWA
 , PAC
 Yap stone, FEI
 f Account: Anglo-
 n, ORA, ORE
 , SOU
 LAC
 se, RIN
 GAJ
 Islands, BIT
 o Coin

Monkey: Capuchin, SAI
 Morsel, ORT
 Mother: Peer Gynt's, ASE
 Mountain: Asia Minor, IDA
 Mulberry: Indian, AAL,
 ACH, AWL
 Muttonbird: New Zealand,
 OII
 Nahoor, SNA
 Native: Mindanao, ATA
 Neckpiece, BOA
 Newt, EFT
 No (Scotch), NAE
 Note: Guido's highest, ELA
 Of scale, SOL
 Nursemaid: Oriental, AMA,
 IYA
 Ocher: Yellow, SIL
 One (Scotch), YIN
 Ornament: Pagoda, TEE
 Oven: Polynesian, UMU
 Ox: Tibetan, YAK
 Pagoda: Chinese, TAA
 Parrot: Hawk, HIA
 New Zealand, KEA
 Part: Footlike, PES
 Particle: Electrified, ION
 Pasha, DEY
 Pass: Mountain, COL
 Paste: Rice, AME
 Pea: Indian split, DAL
 Peasant: Philippine, TAO
 Penpoint, NEB, NIB
 Piece out, EKE
 Pigeon, NUN
 Pine: Textile screw, ARA
 Pistol (slang), GAT
 Pit: Baking, IMU
 Plant: Pepper, AVA
 Play: By Capek, RUR
 Poem: Old French, DIT
 Porgy: Japanese, TAI
 Priest: Biblical high, ELI
 Prince: Ethiopian, RAS
 Pseudonym: Dickens', BOZ
 Queen: Fairy, MAB
 Quince: Bengal, BEL
 Record: Ship's, LOG
 Refuse: Flax (Scotch), PAB,
 POB
 Resin, LAC
 Resort, SPA
 Revolver (slang), GAT
 Right: Cause to turn, GEE
 River: Scotch or English,
 DEE (Spanish), RIO
 Swiss, AAR
 Room: Harem, ODA
 Rootstock: Fern, ROI
 Rose (Persian), GUL
 Ruff: Female, REE
 Rule: Indian, RAJ
 Sailor, GOB, TAR
 Saint: Female (abbr.), STE
 Mohammedan, PIR
 Salt, SAL
 Sash: Japanese, OBI
 Scrap, ORT

Seed: Poppy, MAW
 Small, PIP
 Self, EGO
 Serpent: Vedic sky, AHI
 Sesame, TIL
 Sheep: Female, EWE
 Indian, SHA
 Male, RAM
 Sheepfold (Scotch), REE
 Shelter, LEE
 Shield, ECU
 Shooting match (French),
 TIR
 Shrew: European, ERD
 Shrub: Evergreen, YEW
 Silkworm, ERI
 Snake, ASP, BOA
 Soak, RET
 Son-in-law: Mohammed's,
 ALI
 Sorrel: Wood, OCA
 Spade: Long, narrow, LOY
 Spirit: Malignant, KER
 Spot: Playing-card, PIP
 Spread for drying, TED
 Spring: Mineral, SPA
 Sprite: Water, NIX
 Statesman: Japanese, ITO
 Stern: Toward, AFT
 Stomach: Bird's, MAW
 Street (French), RUE
 Summer (French), ETE
 Sun, SOL
 Swamp, BOG, FEN
 Swan: Male, COB
 Tea: Chinese, CHA
 Temple: Shinto, SHA
 The. See Article
 Thing (law), RES
 Title: Etruscan, LAR
 Monk's, FRA
 Portuguese, DOM
 Spanish, DON
 Turkish, AGA, BEY
 Tool: Cutting, ADZ, AXE
 Mining, GAD
 Piercing, AWL
 Tree: Candlenut, AMA
 Central American, EBO
 East Indian, SAJ, SAL
 Evergreen, YEW
 Hawaiian, KOA, KOU
 Indian, BEL, DAR
 Linden, LIN
 New Zealand, AKE
 Philippine, DAO, TUA,
 TUI
 Rubber, ULE
 South American, APA
 Tribe: New Zealand, ATI
 Turmeric, REA
 Twice, BIS
 Twin: Siamese, ENG
 Uncle (dialect), EAM, EME
 Veil: Chalice, AER, AIR
 Vessel: Wine, AMA
 Vestment: Ecclesiastical,
 ALB

Vetch: Bitter, ERS
 Victorfish, AKU
 Vine: New Zealand, AKA
 Philippine, IYO
 Wallaba, APA
 Wapiti, ELK
 Water (French), EAU
 Waterfall, LIN
 Watering place: Prussian,
 EMS
 Weave: Designating plain,
 UNI
 Weight: Annamese, CAN
 Bulgarian, OKA, OKE
 Burmese, MOO, VIS
 Chinese, FEN, HAO, KIN,
 SSU, TAN, YIN

Cyprus, OKA, OKE
 Danish, LOD, ORT, VOG
 East Indian, TJI
 Egyptian, KAT, OKA, OKE
 English, for wool, TOD
 German, LOT
 Greek, MNA, OKA, OKE
 Indian, SER
 Japanese, FUN, KIN, RIN,
 SHI
 Korean, KON
 Malacca, KIP
 Mongolian, LAN
 Netherlands, ONS
 Norwegian, LOD
 Polish, LUT
 Rangoon, PAI
 Roman, BES

Russian, LOT
 Siamese, BAT, HAP,
 Swedish, ASS, ORT
 Turkish, OKA, OKE
 Yugoslavian, OKA, OKE
 Whales: Herd, GAM, PC
 Wildebeest, GNU
 Wing, ALA
 Witticism, MOT
 Wolframite, CAL
 Worm: African, LOA
 Wreath: Hawaiian, LEI
 Yale, ELI
 Yam: Hawaiian, HOI
 Yes (French), OUI
 Young: Bring forth, EA
 Z (letter), ZED

Words of Four Letters

Aborigine: Borneo, DYAK
 Agave, ALOE
 Animal: Footless, APOD
 Ant: White, ANAI, ANAY
 Antelope: African, ASSE,
 BISA, GUIB, KOBA,
 KUDU, ORYX, POKU,
 PUKU, TOPI, TORA
 Apoplexy: Plant, ESCA
 Apple, POME
 Apricot, ANSU
 Ardor, ELAN
 Armadillo, APAR, PEBA,
 PEVA, TATU
 Ascetic: Mohammedan,
 SUFU
 Association: Chinese, TONG
 Astronomer: Persian, OMAR
 Avatar: Of Vishnu, RAMA
 Axillary, ALAR
 Band: Horizontal (herald-
 dry), FESS
 Barracuda, SPET
 Bark: Mulberry, TAPA
 Base: Column, DADO
 Bearing (heraldry), ORLE
 Beer: Russian, KVAS
 Beige, ECRU
 Being, ESSE
 Beverage: Japanese rice,
 SAKE
 Bird: Asian, MINA, MYNA
 Egyptian sacred, IBIS
 Extinct, DODO, MAMO
 Flightless, KIWI
 Gull-like, TERN
 Hawaiian, IIWI, MAMO
 Parson, KOKO
 Unfledged, EYAS
 Birds: As class, AVES
 Black, EBON
 (French), NOIR
 Blackbird: European, MERL
 Boat: Flat-bottomed, DORY
 Bone: Forearm, ULNA
 Bones, BOSSA
 Box: Japanese, INRO
 Bravo (rare), EUGE

Buffalo: Indian wild, ARNA
 Bull (Spanish), TORO
 Burden, ONUS
 Cabbage: Sliced, SLAW
 Caliph: Mohammedan,
 OMAR
 Canoe: Malay, PRAU, PROA
 Cap: Military, KEPI
 Cape, NESS
 Capital: Ancient Irish,
 TARA
 Case: Article, ETUI
 Cat: Wild, BALU, EYRA
 Chalcedony, SARD
 Chamber: Indian ceremo-
 nial, KIVA
 Channel: Brain, ITER
 Cheese: Dutch, EDAM
 Chest: Sepulchral stone,
 CIST
 Chieftain: Arab, EMIR
 Church: Part of, APSE,
 NAVE
 (Scotch), KIRK
 Claim (law), LIEN
 Cluster: Flower, CYME
 Coin: Chinese, TAEL, YUAN
 German, MARK
 Indian, ANNA
 Iranian, RIAL
 Italian, LIRA
 Moroccan, OKIA
 Siamese, BAHT
 South American, PESO
 Spanish, DURO, PESO
 Turkish, PARA
 Commune: Belgian, AATH
 Composition: Musical,
 OPUS
 Compound: Chemical, DIOL
 Constellation: Southern,
 PAVO
 Council: Russian, DUMA
 Counsel, REDE
 Covering: Seed, ARIL
 Cross: Egyptian, ANKH
 Cry: Bacchanalian, EVOE
 Cup (Scotch), TASS

Cupbearer, SAKI
 Dagger, DIRK
 Malay, KRIS
 Dam: River, WEIR
 Dash, ELAN
 Date: Roman, IDES
 Dawn: Pertaining to, E
 Dean: English, INGE
 Decay: In fruit, BLET
 Deer: Sambar, MAHA
 Disease: Skin, ACNE
 Disk: Solar, ATEN
 Dog: Hunting, ALAN
 Drink: Hindu intoxicant,
 SOMA
 Duck, SMEE, SMEW, T
 Dynasty: Chinese, CH
 CHIN, CHOU, CH
 HSIA, MING, SU
 TANG, TSIN
 Mongol, YUAN
 Eagle: Biblical, GIER
 Sea, ERNE
 Egyptian: Christian, CO
 Ear: Pertaining to, OT
 Entrance: Mine, ADIT
 Esau, EDOM
 Escutcheon: Voided, O
 Eskers, OSAR
 Evergreen: New Zealand,
 TAWA
 Fairy: Persian, PERI
 Family: Italian, ESTE
 Far (comb. form), TEL
 Farewell, VALE
 Father (French), PERE
 Fennel: Philippine, AN
 Fever: Malarial, AGUE
 Fiber: East Indian, JUT
 Firn, NEVE
 Fish: Carplike, DACE
 Hawaiian, ULUA
 Herringlike, SHAD
 Mackerellike, CERO
 Marine, HAKE
 Sea, LING, MERO, O
 Spiny-finned, GOBY
 Food: Tropical, TABO

- etric, IAMB
 , ERST
 Of Carthage,
 Southern, MIDI
 LEX
 RSE
 PAT
 ard, FARO, SKAT
 European wild,
 Y
 : Hindu, SARI
 , TOGA
 CORA
 DE, ONYX, OPAL,
 Y
 Amphibians (incl.
), RANA
 plans (incl. tree
), HYL
 es, ORYX
 ALCA, URIA
 PIS
 American os-
 es), RHEA
 cranes), GRUS
 magpies), PICA
 peacocks), PAVO
 ns, INIA
 (incl. mallards),
 \$
 (burbots), LOT
 (incl. bowfins),
 \$
 ee (snow geese),
 \$
 KEMA
 ARUM, GEUM
 (water scorpions),
 \$
 ALOE
 ls (mankind),
 \$
 , DISA
 SIO, BUBO, OTUS
 NIPA
 is, SULA
 OVIS
 Eurasian, ULEX
 (hollies), ILEX
 (incl. Virginia
 w), ITEA
 tropical, EVEA
 (sand snakes),
 \$
 OLOR
 chocolate, COLA
 bony family),
 \$
 incl. maples),
 \$
 Olives), OLEA
 opical, EVEA
 EMY
 ld, IBEX, KRAS,
 , TAIR, THAR
 rian, ASUR
- Babylonian, ADAD, ADDU,
 ENKI, ENZU, IRR
 NABU, NEBO, UTUG
 Celtic, LLEU, LLEW
 Hindu, AGNI, CIVA,
 DEVA, DEWA, KAMA,
 RAMA, SIVA, VAYU
 Phrygian, ATYS
 Semitic, BAAL
 Teutonic, HLER
 Goddess: Babylonian, ERUA,
 GULA
 Hawaiian, PELE
 Hindu, DEVI, KALI, SHRI,
 VACH
 Gooseberry: Hawaiian,
 POHA
 Gourd, PEPO
 Grafted (heraldry), ENTE
 Grandfather (obsolete),
 AIEL
 Grandparents: Pertaining
 to, AVAL
 Grass: Hawaiian, HILO
 Gray (French), GRIS
 Green (heraldry), VERT
 Groom: Indian, SYCE
 Half (prefix), DEMI, HEMI,
 SEMI
 Hamlet, DORP
 Hammer-head: Part of,
 PEEN
 Handle, ANSA
 Harp: Japanese, KOTO
 Hartbeest, ASSE, TORA
 Hautboy, OBOE
 Hawk: Taken from nest
 (falconry), EYAS
 Hearing (law), OYER
 Heater: For liquids, ETNA
 Herb: Aromatic, ANET,
 DILL
 Fabulous, MOLY
 Perennial, GEUM, SEGO
 Pot, WORT
 Used for blue dye, WADE,
 WOAD
 Hill: Flat-topped, MESA
 Sand, DENE, DUNE
 Hoarfrost, RIME
 Hog: Immature female,
 GILT
 Holly, ILEX
 House: Cow, BYRE
 (Spanish), CASA
 Ice: Floating, FLOE
 Image, ICON, IKON
 Incarnation: Of Vishnu,
 RAMA
 Indian: Algonquian, CREE,
 SAUK
 Central American, MAYA
 Iroquoian, ERIE
 Mexican, CORA
 Peruvian, CANA, INCA,
 MORO
 Shoshonean, HOPI
 Siouan, OTOE
- Southwestern, HOPI,
 PIMA, YUMA, ZUNI
 Insect: Immature, PUPA
 Instrument: Stringed,
 LUTE, LYRE
 Ireland, EIRE, ERIN
 Jacket: English, ETON
 Jail (British), GAOL
 Jar, OLLA
 Judge: Mohammedan, CADI
 Juniper: European, CADE
 Kiln, OAST, OVEN
 King: British legendary,
 LUDD, NUDD
 Kiss, BUSS
 Knife: Philippine, BOLO
 Koran: Section of, SUR
 Laborer: Spanish American,
 PEON
 Lake: Mountain, TARN
 (Scotch), LOCH
 Lamp: Miner's, DAVY
 Landing place: Indian,
 GHAT
 Language: Buddhist, PALI
 Japanese, AINU
 Latvian, LETT
 Layer: Of iris, UVEA
 Leaf: Palm, OLAY, OLLA
 Legislature: Ukrainian,
 RADA
 Lemur, LORI
 Leopard, PARD
 Let it stand, STET
 Letter: Greek, BETA, IOTA,
 ZETA
 Hebrew, AYIN, BETH,
 CAPH, KOPH, RESH,
 SHIN, TETH, YODH
 Papal, BULL
 Lily, ALOE
 Literature: Hindu sacred,
 VEDA
 Lizard, GILA
 Monitor, URAN
 Loquat, BIWA
 Magistrate: Genoese or Ve-
 netian, DOGE
 Man (Latin), HOMO
 Mark: Omission, DELE
 Marmoset: South American,
 MICO
 Meadow: Fertile, VEGA
 Measure: Electric, VOLT,
 WATT
 Force, DYNE
 Hebrew, OMER
 Printing, PICA
 Spanish or Portuguese,
 VARA
 Swiss land, IMMI
 Medley, OLIO
 Merganser, SMEW
 Milk (French), LAIT
 Molding, GULA
 Curved, OGEE
 Mongoose: Crab-eating,
 URVA

Monk: Tibetan, LAMA
 Monkey: African, MONA, WAAG
 Ceylonese, MAHA
 Cochin-China, DOUC
 South American, SAKI, TITI
 Monkshood, ATIS
 Month: Jewish, ADAR, ELUL, IYAR
 Mother (French), MERE
 Mountain: Thessaly, OSSA
 Mouse: Meadow, VOLE
 Mythology: Norse, EDDA
 Nail (French), CLOU
 Native: Philippine, MORO
 Nest: Of pheasants, NIDE
 Network, RETE
 No (German), NEIN
 Noble: Mohammedan, AMIR
 Notice: Death, OBIT
 Novel: By Zola, NANA
 Nursemaid: Oriental
 AMAH, AYAH, EYAH
 Nut: Philippine, PILI
 Oak: Holm, ILEX
 Oil (comb. form), OLEO
 Ostrich: American, RHEA
 Oven, KILN, OAST
 Owl: Barn, LULU
 Ox: Celebes wild, ANOE
 Extinct wild, URUS
 Palm, ATAP, NIPA, SAGO
 Parliament, DIET
 Parrot: New Zealand, KAKA
 Pass: Indian mountain, GHAT
 Passage: Closing (music), CODA
 Peach: Clingstone, PAVY
 Peasant: Indian, RYOT
 Old English, CARL
 Pepper: Australasian, KAVA
 Perfume, ATAR
 Persia, IRAN
 Person: Extraordinary, ONER
 Pickerel or pike, ESOX
 Pitcher, EWER
 Plant: Aromatic, NARD
 Century, ALOE
 Indigo, ANIL
 Pepper, KAVA
 Platform: Raised, DAIS
 Plum: Wild, SLOE
 Pods: Vegetable, OKRA, OKRO
 Poem: Epic, EPOS
 Poet: Persian, OMAR
 Roman, OVID
 Poison, BAKE
 Arrow, INEE
 Porkfish, SISI
 Portico: Greek, STOA
 Premium, AGIO
 Priest: Mohammedan, IMAM
 Prima donna, DIVA

Prong: Fork, TINE
 Pseudonym: Lamb's, ELIA
 Queen: Carthaginian, DIDO
 Hindu, RANI
 Rabbit, CONY
 Race: Of Japan, AINU
 Rail: Ducklike, COOT
 North American, SORA
 Redshank, CLEE
 Refuse: After pressing, MARC
 Regiment: Turkish, ALAI
 Reliquary, ARCA
 Resort: Italian, LIDO
 Ridges: Sandy, ASAR, OSAR
 River: German, ELBE, ODER
 Italian, ADDA
 Siberian, LENA
 Road: Roman, ITER
 Rockfish: California, RENA
 Rodent: Mouselike, VOLE
 South American, PACA
 Rootstock, TARO
 Salamander, NEWT
 Salmon: Silver, COHO
 Young, PARR
 Same (Greek), HOMO
 (Latin), IDEM
 Sauce: Fish, ALEC
 School: English, ETON
 Seaweed, AGAR, ALGA, KELP
 Secular, LAIC
 Sediment, SILT
 Seed: Dill, ANET
 Of vetch, TARE
 Serf, ILOT
 Sesame, TEEL
 Settlement: Eskimo, ETAH
 Shark: Atlantic, GATA
 European, TOPE
 Sheep: Wild, UDAD
 Sheltered, ALEE
 Shield, EGIS
 Ship: Jason's, ARGO
 Left side of, PORT
 Two-masted, BRIG
 Shrine: Buddhist, TOPE
 Shrub: New Zealand, TUTU
 Sign: Magic, RUNE
 Silkworm, ERIA
 Skin: Beaver, PLEW
 Skink: Egyptian, ADDA
 Slave, ESNE
 Sloth: Two-toed, UNAU
 Smooth, LENE
 Snow: Glacial, NEVE
 Soapstone, TALC
 Society: African secret, EGBO, PORO
 Son: Of Seth, ENOS
 Song (German), LIED
 Unaccompanied, GLEE
 Sound: Lung, RALE
 Sour, ACID
 Sow: Young, GILT
 Spike: Brad-shaped, BROB

Spirit: Buddhist evil, M
 Stake: Poker, ANTE
 Star: Temporary, NOVA
 Starch: East Indian, SA
 Stone: Precious, OPAL
 Strap: Bridle, REIN
 Strewn (heraldry), SEM
 Sweetsop, ATES, ATTA
 Sword: Fencing, EPEE
 Tambourine: African, T
 Tapir: Brazilian, ANT
 Tax, CESS
 Tea: South American, MATE
 Therefore (Latin), ERGO
 Thing: Extraordinary, ONER
 Three (dice, cards, etc.), TREY
 Thrush: Hawaiian, OMA
 Tide, NEAP
 Tipster: Racing, TOUT
 Tissue, TELA
 Title: Etruscan, LARS
 Hindu, BABU
 Indian, RAJA
 Mohammedan, EMIR, IMAM
 Persian, BABA
 Spanish, DONA
 Turkish, AGHA, BABA
 Toad: Largest known, A
 Tree, HYLA
 Tool: Cutting, ADZE
 Track: Deer, SLOT
 Tract: Sandy, DENE
 Tree: Apple, SORB
 Central American, EB
 East Indian, TEAK
 Eucalyptus, YATE
 Guiana and Trinidad, MORA
 Javanese, UPAS
 Linden, LIME, LINN, TEIL, TILL
 Sandarac, ARAR
 Sassafras, AGUE
 Tamarisk salt, ATLE
 Tribe: Moro, SULU
 Trout, CHAR
 Urchin: Street, ARAB
 Vessel: Arab, DHOW
 Vestment: Ecclesiastical, COPE
 Vetch, TARE
 Vine: East Indian, SON
 Violinist: Famous, AUF
 Vortex, EDDY
 Wampum, PEAG
 Wapiti, STAG
 Waste: Allowance for, W
 Watchman: Indian, MI
 Water (Spanish), AGUA
 Waterfall, LINN
 Wavy (heraldry), OND
 UNDE
 Wax, CERE
 Chinese, PELA

Biblical, TARE
Ancient, MINA
h (pl.), ESER
Asian, TAEI
, MINA
ese, BAHT
ne (rare), EUGE
CETE

Killer, ORCA
White, HUSE, HUSO
Whirlpool, EDDY
Wife: Of Geraint, ENID
Willow: Virginia, ITEA
Wine, PORT
Winged, ALAR
(Heraldry), AILE

Wings, ALAE
Withered, SERE
Without (French), SANS
Wool: To comb, CARD
Work, OPUS
Wrong: Civil, TORT
Young: Bring forth, YEAN

Words of Five Letters

of dead: Babylonian, ARALU
ne: Borneo, DAYAK
ng, EPODE
GAVE
Footless, APODE
IMET
e: African, ADDAX, BEISA,
AMA, ELAND, GUIBA, ORIBI,
NG
GORAL, SEROW
n, SASIN
an, SAIGA
ointed, OGIVE
lo, APARA, POYOU, TATOU
ot, ARARU
Trunk, AORTA
ion: Russian, ARTEL
, CABAL
English, READE
ton, GOLEM, ROBOT
Motion-picture, OSCAR
Fishing, CREEL
ussian, KVAAS
Mohammedan, KORAN
sian, MINAH, MYNAH
n, SHAMA
ke, PIPIT
ke, GREBE
e, VIREO
American, AGAMI
ning, GREBE
French), NOIRE
dry), SABLE
d: European, MERLE, OUSEL,
EL
Glacial, SERAC
eraldry), AZURE
skimo, BIDAR, UMIK
e, COLIN, QUAIL
omb. form), OSTEO
IBIA
FEMUR
Twig, BESOM
(French), FRERE
, AARON
Eskimo, BIDAR, KAYAK
apal, FANON, ORALE
sary, SERAI
ld playing, TAROT
ar: New Zealand, AWETO
AMENT
Stone, GEODE
pod, SQUID
a, WHALE
ESSED
Pertaining to, MALAR
a: Arab, EMEER
cotch), BAIRN

Cigar, CLARO
Coating: Seed, TESTA
(Cockatoo: Palm, ARARA
Coin: Costa Rican, COLON
Danish, KRONE
Ecuadorian, SUCRE
English, GROAT, PENCE
French, FRANC
German, KRONE, TALER
Hungarian, PENGÓ
Icelandic, KRONA
Indian, RUPEE
Iraqi, DINAR
Norwegian, KRONE
Polish, ZLOTY
Russian, COPEC, KOPEK, RUBLE
Swedish, KRONA
Turkish, ASPER
Yugoslav, DINAR
Collar: Papal, FANON, ORALE
Roman, RABAT
Commune: Italian, TREIA
Composition: Choral, MOTET
Compound: Chemical, ESTER
Conceal (law), ELOIN
Council: Ecclesiastical, SYNOD
Court: Anglo-Saxon, GEMOT
Inner, PATIO
Crest: Mountain, ARETE
Crown: Papal, TIARA
Cuttlefish, SEPIA
Date: Roman, NONES
Decree: Mohammedan, IRADE
Russian, UKASE
Deposit: Loam, LOESS
Desert: Gobi, SHAMO
Devilfish, MANTA
Disease: Cereals, ERGOT
Disk, PATEN
Dog: Wild, DHOLE, DINGO
Dormouse, LEROT
Drum, TABOR
Duck: Sea, EIDER
Dynasty: Chinese, CHING, LIANG, SHANG
Earthquake, SEISM
Eel, ELVER, MORAY
Ermine: European, STOAT
Ether: Crystalline, APIOL
Fabric: Velvetlike, PANNE
Fabulist, AESOP
Family: Italian, CENCI
Fiber: West Indian, SISAL
Fig: Smyrna, ELEME, ELEMI
Figure: Of speech, TROPE
Finch: European, SERIN
Fish: American small, KILLY
Flower: Garden, ASTER
Friend (Spanish), AMIGO

Fruit: Tropical, MANGO
 Fungus: Rye, ERGOT
 Furze, GORSE
 Gateway, TORAN, TORII
 Gem, AGATE, BERYL, PEARL, TOPAZ
 Genus: Barnacles, LEPAS
 Bears, URSUS
 Birds (loons), GAVIA
 Birds (nuthatches), SITTA
 Cats, FELIS
 Dogs, CANIS
 Fishes (chiro), ELOPS
 Fishes (perch), PERCA
 Geese, ANSER
 Grasses, STIPA
 Grasses (incl. oats), AVENA
 Gulls, LARUS
 Hares, rabbits, LEPUS
 Hawks, BUTEO
 Herbs, old world, INULA
 Herbs, trailing or climbing, APIOS
 Herbs, tropical, TACCA, URENA
 Horses, EQUUS
 Insects (olive flies), DACUS
 Lice, plant, APHIS
 Lichens, USNEA
 Lizards, AGAMA
 Moles, TALPA
 Mollusks, OLIVA
 Monkeys, CEBUS
 Palms, ARECA
 Pigeons, GOURA
 Plants (amaryllis family), AGAVE
 Ruminants (goats), CAPRA
 Shrubs, Asiatic, SABIA
 Shrubs (heath), ERICA
 Shrubs (incl. raspberry), RUBUS
 Shrubs, tropical, IXORA, TREMA,
 URENA
 Ticks, ARGAS
 Trees (of elm family), TREMA, ULMUS
 Trees, tropical, IXORA, TREMA
 Goat: Bezoar, PASAN
 God: Assyrian, ASHIR, ASHUR, ASSUR
 Babylonian, DAGAN, SIRIS
 Gaelic, DAGDA
 Hindu, BHAGA, INDRA, SHIVA
 Japanese, EBISU
 Philistine, DAGON
 Phrygian, ATTIS
 Teutonic, AEGIR, GYMIR
 Welsh, DYLAN
 Goddess: Babylonian, ISTAR, NANAI
 Hindu, DURGA, GAURI, SHREE
 Group: Of six, HEXAD
 Grove: Sacred to Diana, NEMUS
 Growing out, ENATE
 Guitar: Hindu, SITAR
 Gull: PEWEE, PEWIT
 Hartebeest, CAAMA
 Headdress: Jewish or Persian, TIARA
 Liturgical, MITER, MITRE
 Heath, ERICA
 Herb: Grasslike marsh, SEDGE
 Heron, EGRET
 Hog: Young, SHOAT, SHOTE
 Image, EIKON
 Indian: Cariban, ARARA

Iroquoian, HURON
 Mexican, AZTEC, OPATA, OTOMI
 Muskogean, CREEK
 Siouan, OSAGE, TETON
 Spanish American, ARARA, CARIB
 Inflorescence: Racemose, AMENT
 Insect: Immature, LARVA
 Intrigue, CABAL
 Iris: Yellow, SEDGE
 Juniper, GORSE, RETEM
 Kidneys: Pertaining to, RENAL
 King: British legendary, LLUDD
 Kite: European, GLEDE
 Kobold, NISSE
 Land: Cultivated, ARADA, ARADO
 Landholder (Scotch), LAIRD, THANE
 Language: Dravidian, TAMIL
 Lariat, LASSO, REATA
 Laughing, RIAANT
 Lawgiver: Athenian, DRACO, SOLON
 Leaf: Calyx, SEPAL
 Fern, FROND
 Lemur, LORIS
 Letter: English, AITCH
 Greek, ALPHA, DELTA, GAMMA
 KAPPA, OMEGA, SIGMA, THETA
 Hebrew, ALEPH, CHETH, GIMEL
 SADHE, ZAYIN
 Lichen, USNEA
 Lighthouse, PHARE
 Lizard: Old World, AGAMA
 Loincloth, DHOTI
 Louse: Plant, APHID
 Macaw: Brazilian, ARARA
 Mahogany: Philippine, ALMON
 Mammal: Badgerlike, RATEL
 Civetlike, GENET
 Giraffelike, OKAPI
 Raccoonlike, COATI
 Man (French), HOMME
 Marble, AGATE
 Mark: Insertion, CARET
 Market place: Greek, AGORA
 Marsupial: Australian, KOALA
 Measure: Electric, FARAD, HENRY
 Energy, JOULE
 Metric, LITER, STERE
 Printing, AGATE
 Russian, VERST
 Mixture: Smelting, MATTE
 Mohicans: Last of, UNCAS
 Molding: Convex, OVOLO, TORUS
 Mole, TALPA
 Monkey: African, PATAS
 Capuchin, SAJOU
 Howling, ARABA
 Monkshood, ATEES
 Month: Jewish, NISAN, SIVAN, TEBET
 Museum (French), MUSEE
 Musketeer, ATHOS
 Native: Aleutian, ALEUT
 New Zealand, MAORI
 Neckpiece: Ecclesiastical, AMICE
 Nerve (comb. form), NEURO
 Nest: Eagle's or hawk's, AERIE
 Insect's, NIDUS
 Net: Fishing, SEINE
 Newsstand, KIOSK

, AZOTE
 Mohammedan, AMEER
 Stone, GEODE
 NARES
 Irregularly, EROSE
 Mohammedan, HOURI
 Roman, EDILE
 n, ELEMI
 c; Mouthlike, STOMA
 Funeral, ELOGE
 STOMA
 Left-hand, VERSO
 Right-hand, RECTO
 RECA, BETEL
 Colorado, ESTES
 , ATTAR
 her: Greek, PLATO
 Stone, STELA, STELE
 : Glacial, SERAC
 LANO
 Century, AGAVE
 ng, LIANA
 CUMIN
 sian perennial, RAMIE
 nal, SENNA
 d family, CRESS
 mmunion, PATEN
 yric, EPODE
 owest, NADIR
 BELE, ALAMO, ASPEN
 , Spanish American, ATOLE
 air, NEWEL
 Mohammedan, IMAUM
 n, AMEBA
 (French), REINE
 RANEE
 CONEY
 AKE
 (aldry), GULES
 Moslem, ISLAM
 LEMI
 (law), ADEEM
 n, MIDAS, NABOB
 andy, ESKAR, ESKER
 French, LOIRE, SEINE
 California, REINA
 k: Fragrant, ORRIS
 male, REEVE
 ck, KYACK
 ereal, ESTER
 NITER, NITRE
 n: Eastern, SALAM
 k: Old World, TEREK
 OLENT
 Fish, SHOAL
 public, LYCEE
 s: Mohammedan, KORAN
 ALGAE
 omatic, ANISE
 HAREM, SERAI
 OT
 ild, AUDAD
 , OVINE
 EGIS
 oden, SABOT
 ickled bamboo, ACHAR
 ild, CAROM, MASSE
 uddhist, STUPA

Shrub: Burning bush, WAHOO
 Ornamental evergreen, TOYON
 Used in tanning, SUMAC
 Silk: Watered, MOIRE
 Sister (French), SOEUR
 (Latin), SOROR
 Six: Group of, HEXAD
 Skeleton: Marine, CORAL
 Slave, HELOT
 Snake, ABOMA, ADDER, COBRA, RACER
 Soldier: French, POILU
 Indian, SEPOY
 Sour, ACERB
 Spirit: Air, ARIEL
 Staff: Shepherd's, CROOK
 Starwort, ASTER
 Steel (German), STAHL
 Stockade: Russian, ETAPE
 Stop (nautical), AVAST
 Storehouse, ETAPE
 Subway: Parisian, METRO
 Tapestry, ARRAS
 Tea: Paraguayan, YERBA
 Temple: Hawaiian, HEIAU
 Terminal: Positive, ANODE
 Theater: Greek, ODEON, ODEUM
 Then (French), ALORS
 Thread: Surgical, SETON
 Thrush: Wilson's, VEERY
 Title: Hindu, BABOO
 Indian, RAJAH, SAHEB, SAHIB
 Mohammedan, EMEER, IMAUM
 Tree: Buddhist sacred, PIPAL
 East Indian cotton, SIMAL
 Hickory, PECAN
 Light-wooded, Balsa
 Malayan, TERAP
 Mediterranean, CAROB
 Mexican, ABETO
 Mexican pine, OCOTE
 New Zealand, MAIRE
 Philippine, ALMON
 Rain, SAMAN
 South American, UMBRA
 Tamarack, LARCH
 Tamarisk salt, ATLEE
 West Indian, ACANA
 Trout, CHARR
 Troy, ILION, ILIUM
 Twin: Siamese, CHANG
 Vestment: Ecclesiastical, STOLE
 Violin: Famous, AMATI, STRAD
 Volcano: Mud, SALSE
 Wampum, PEAGE
 War cry: Greek, ALALA
 Wavy (heraldry), UNDEE
 Weight: Jewish, GERAH
 Wen, TALPA
 Wheat, SPELT
 Wheel: Persian water, NORIA
 Whitefish, CISCO
 Willow, OSIER
 Window: Bay, ORIEL
 Wine, MEDOC, RHINE, TINTA, TOKAY
 Winged, ALATE
 Woman (French), FEMME
 Year: Excess of solar over lunar, EPACT
 Zoroastrian, PARSI

Words of Six or More Letters

- Agave, MAGUEY
 Alkaloid: Crystalline, ESERIN, ESERINE
 Alligator, CAYMAN
 Amphibole, EDENITE, URALITE
 Ant: White, TERMITE
 Antelope: African, DIKDIK, DUIKER,
 GEMSBOK, IMPALA, KOODOO
 European, CHAMOIS
 Indian, NILGAI, NILGAU, NILGHAI,
 NILGHAU
 Ape: Asian or East Indian, GIBBON
 Appendage: Leaf, STIPEL, STIPULE
 Armadillo, PELUDO, TATOUAY
 Arrowroot, ARARAO
 Ascetic: Jewish, ESSENE
 Ass: Asian wild, ONAGER
 Avatar: Of Vishnu, KRISHNA
 Babylonian, ELAMITE
 Badge: Shoulder, EPAULET
 Baldness, ALOPECIA
 Barracuda, SENNET
 Bark: Aromatic, SINTOC
 Bearlike, URSINE
 Beetle, ELATER
 Bible: Zoroastrian, AVESTA
 Bird: Sea, PETREL
 South American, SERIEMA
 Wading, AVOCET, AVOSET
 Bone: Leg, FIBULA
 Branched, RAMATE
 Brother (Latin), FRATER
 Bunting: European, ORTOLAN
 Call: Trumpet, SENNET
 Canoe: Eskimo, BAIDAR, OOMIAK
 Caravansary, IMARET
 Cat: Asian or African, CHEETAH
 Leopardlike, OCELOT
 Cenobite: Jewish, ESSENE
 Centerpiece: Table, EPERGNE
 Cetacean, DOLPHIN, PORPOISE
 Chariot, ESSEDA, ESSEDE
 Chief: Seminole, OSCEOLA
 Claim: Release as (law), REMISE
 Clock: Water, CLEPSYDRA
 Cloud, CUMULUS, NIMBUS
 Coach: French hackney, FIACRE
 Coin: Czech, KORUNA
 Ethiopian, TALARI
 Finnish, MARKKA
 German, THALER
 Greek, DRACHMA
 Haitian, GOURDE
 Honduran, LEMPIRA
 Hungarian, FORINT
 Indo-Chinese, PIASTER
 Netherlands, GUILDER
 Panamanian, BALBOA
 Paraguayan, GUARANI
 Portuguese, ESCUDO
 Russian, COPECK, KOPECK, ROUBLE
 Spanish, PESETA
 Venezuelan, BOLIVAR
 Communion: Last holy, VIATICUM
 Conceal (law), ELOIGN
 Confection, PRALINE
 Construction: Sentence, SYNTAX
 Convexity: Shaft of column, ENTASIS
 Court: Anglo-Saxon, GEMOTE
 Cow: Sea, DUGONG, MANATEE
 Cylindrical, TERETE
 Dagger, STILETTO
 Malay, CREESE, KREESE
 Date: Roman, CALENS, KALENS
 Deer, CARIBOU, WAPITI
 Disease: Plant, ERINOSE
 Doorkeeper, OSTIARY
 Dragonflies: Order of, ODANATA
 Drink: Of gods, NECTAR
 Drum: TABOUR
 Moorish, ATABAL, ATTABAL
 Duck: Fish-eating, MERGANSER
 Sea, SCOTER
 Dynasty: Chinese, MANCHU
 Eel, CONGER
 Edit, REDACT
 Envelope: Flower, PERIANTH
 Eskimo, AMERIND
 Ether: Crystalline, APIOLE
 Excuse (law), ESSOIN
 Eyespots, OCELLI
 Fabric, ESTAMENE, ESTAMIN, ETAMIN
 Falcon: European, KESTREL
 Figure: Used as column, CARYATID,
 TELAMON
 Fine: For punishment, AMERCE
 Fish: Asian fresh-water, GOURAMI
 Pikelike, BARRACUDA
 Five: Group of, PENTAD
 Fly: African, TSETSE
 Foot: Metric, ANAPEST, IAMBUS
 Foxlike, VULPINE
 Frying pan, SPIDER
 Fur, KARAKUL
 Galley: Greek or Roman, BIREME,
 TRIEME
 Game: Card, ECARTE
 Garment: Greek, CHLAMYS
 Gateway, GOPURA, TORANA
 Genus: Birds (ravens, crows), CORVUS
 Eels, CONGER
 Fishes, ANABAS
 Foxes, VULPES
 Herbs, ANEMONE
 Insects, CICADA
 Lemurs, GALAGO
 Mints (incl. catnip), NEPETA
 Mollusks, ANOMIA, ASTARTE, TERES
 Mollusks (incl. oysters), OSTREA
 Monkeys (spider monkeys), ATELES
 Thrushes (incl. robins), TURDUS
 Trees (of elm family), CELTIS
 Trees (incl. dogwood), CORNUS
 Trees, tropical American, SAPOTA
 Wrens, NANNUS
 Gibbon, SIAMANG, WOUWOU
 Gland: Salivary, RACEMOSE
 Goat: Bezoar, PASANG
 Goatlike, CAPRINE
 God: Assyrian, ASHSHUR, ASSHUR
 Babylonian, BABBAR, MARDUK, ME
 DACH, NANNAR, NERGAL, SHAM
 Hindu, BRAHMA, KRISHNA, VISHNU
 Tahitian, TAAROA
 Goddess: Babylonian, ISHTAR

CHANDI, HAIMAVATI,
SHMI, PARVATI, SARASVATI,
ASWATI
ent, POLITY
: Persian, SATRAP
a (Scotch), NEPOTE
Of five, PENTAD
e, ENNEAD
en, HEPTAD
first year, LEVERET
ord, SPINET
pine, EDELWEISS
e, GINSENG
African, FREESIA
EREMITE
gendary, PALADIN
TTERN
EQUINE
short-legged, BEAGLE
rench), MAISON
ETIN
at: Stone, NEOLITH
on: Hindu, AVATAR
APACHE, COMANCHE, PAIUTE,
A
kish, IMARET
Order of, DIPTERA
nt: Japanese banjolike, SAMISEN
, CLAVIER, SPINET
AREOLA
COLIMA
Old Testament, RAETAM
m, ATABAL
ry, OBERON
PATELLA
ACHETE
Sumatran, SIMPAI
e: Spanish, CORTES
frican, GALAGO
scar, AYEAYE
reek, EPSILON, LAMBDA, OMI-
, UPSILON
DALETH, LAMEDH, SAMEKH
e, PHAROS
UANA
PACA
TETANUS
CADA, CICALA
razilian, MARACAN
Astolat, ELAINE
Madagascar, TENDRAC,
EC
hish), HOMBRE
South American, TAMARIN
BANDICOOT, WOMBAT
POGROM
anish, ALCALDE
Electric, AMPERE, COULOMB,
WATT
Quack, NOSTRUM
Religious order, CENOBITE
TRECLE
frican, GRIVET, NISNAS
ANGUR
ne, MACHIN
merican, PINCHE, SAIMIRI,
LI, SAPAJOU
PHIMERA, GORGON

(Comb. form), TERATO
Cretan, MINOTAUR
Month: Jewish, HESHVAN, KISLEV, SHE-
BAT, TAMMUZ, TISHRI, VEADAR
Mountain: Asia Minor, ARARAT
Mulct, AMERCE
Musketeer, ARAMIS, PORTHOS
Nearsighted, MYOPIA
Net, TRAMMEL
New York City, GOTHAM
Nine: Group of, ENNEAD
Nobleman: Spanish, GRANDEE
Official: Roman, AEDILE
Onyx: Mexican, TECALI
Order: Dragonflies, ODANATA
Insects, DIPTERA
Organ: Plant, PISTIL
Ornament: Shoulder, EPAULET
Overcoat: Military, CAPOTE
Ox: Wild, BANTENG
Oxidation: Bronze or copper, PATINA
Paralysis: Incomplete, PARESIS
Pear: Alligator, AVOCADO
Persimmon: Mexican, CHAPOTE
Pipe: Peace, CALUMET
Plaid (Scotch), TARTAN
Plain, PAMPAS, STEPPE, TUNDRA
Plant: Buttercup family, ANEMONE
Century, MAGUEY
On rocks, LICHEN
Plowing: Fit for, ARABLE
Poem: Heroic, EPOPEE
Six-lined, SESTET
Point: Highest, ZENITH
Potion: Love, PHILTRE, PHILTRE
Protozoan, AMOEBA
Punish, AMERCE
Purple (heraldry), PURPURE
Queen: Fairy, TITANIA
Race: Skiing, SLALOM
Rat, BANDICOOT, LEMMING
Retort, RIPOST, RIPOSTE
Ring: Harness, TERRET
Little, ANNULET
Rodent: Jumping, JERBOA
Spanish American, AGOUTI, AGOUTY
Sallor: East Indian, LASCAR
Salmon: Young, GRILSE
Salutation: Eastern, SALAAM
Sandpiper, PLOVER
Sandy, ARENOSE
Sapodilla, SAPOTA, SAPOTE
Saw: Surgical, TREPAN
Seven: Group of, HEPTAD
Sexes: Common to both, EPICENE
Shawl: Mexican, SERAPE
Sheathing: Flower, SPATHE
Sheep: Wild, AOUDAD, ARGALI
Shipworm, TEREDO
Shoes: Mercury's winged, TALARIA
Shortening: Syllable, SYSTOLE
Shrub, SPIRAEA
Sickle-shaped, FALCATE
Silver (heraldry), ARGENT
Snake, ANACONDA
Speech: Loss of, APHASIA
Spiral, HELICAL
Staff: Bishop's, CROSIER, CROZIER

Stalk: Plant, PETIOLE
 State: Swiss, CANTON
 Studio, ATELIER
 Swan: Young, CYGNET
 Swimming, NATANT
 Sword-shaped, ENSATE
 Terminal: Negative, CATHODE
 Third (music), TIERCE
 Thrust: Fencing, RIPOST, RIPOSTE
 Tile: Pertaining to, TEGULAR
 Tomb: Empty, CENOTAPH
 Tooth (comb. form), ODONTO
 Tower: Mohammedan, MINARET
 Tree: African timber, BAOBAB
 Black gum, TUPELO
 East Indian, MARGOSA
 Locust, ACACIA
 Malayan, SINTOC
 Marmalade, SAPOTE
 Urn: Tea, SAMOVAR
 Vehicle, LANDAU, TROIKA

Verbose, PROLIX
 Viceroy: Egyptian, KHEDIVE
 Vulture: American, CONDOR
 Warehouse (French), ENTREPOT
 Whale: White, BELUGA
 Whirlpool, VORTEX
 Will: Addition to, CODICIL
 Having left, TESTATE
 Wind, CHINOOK, MONSOON, SIM
 SIMOON, SIROCCO
 Window: In roof, DORMER
 Wine, BARBERA, BURGUNDY, CA
 NET, CHABLIS, CHIANTI, CL
 MUSCATEL, RIESLING, SAUT
 SHERRY, ZINFANDEL
 Wolfish, LUPINE
 Woman: Boisterous, TERMAGANT
 Woolly, LANATE
 Workshop, ATELIER
 Zoroastrian, PARSEE

Old-Testament Names

(We do not pretend that this list is all-inclusive. We include only these names which in our opinion are most often in crossword puzzles.)

AARON: First high priest of Jews; son of Amram; brother of Miriam and Moses; father of Abihu, Eleazer, Ithamar, and Nadab.

ABEL: Son of Adam; slain by Cain.

ABIGAIL: Wife of Nabal; later, wife of David.

ABIHU: Son of Aaron.

ABIMELECH: King of Gerar.

ABNER: Commander of army of Saul and Ishbosheth; slain by Joab.

ABRAHAM (or ABRAM): Patriarch; forefather of the Jews; son of Terah; husband of Sarah; father of Isaac and Ishmael.

ABSALOM: Son of David and Maacah; revolted against David; slain by Joab.

ACHISH: King of Gath; gave refuge to David.

ACHSA (or ACHSAH): Daughter of Caleb; wife of Othniel.

ADAH: Wife of Lamech.

ADAM: First man; husband of Eve; father of Cain, Abel, and Seth.

ADONIJAH: Son of David and Haggith.

AGAG: King of Amalek; spared by Saul; slain by Samuel.

AHASUERUS: King of Persia; husband of Vashti and, later, Esther; sometimes identified with Xerxes the Great.

AHIJAH: Prophet; foretold accession of Jeroboam.

AHINOAM: Wife of David.

AMASA: Commander of army of David; slain by Joab.

AMNON: Son of David and Ahinoam; ravished Tamar; slain by Absalom.

AMRAM: Husband of Jochebed; father of Aaron, Miriam and Moses.

ASENATH: Wife of Joseph.

ASHER: Son of Jacob and Zilpah.

BALAAAM: Prophet; rebuked by his donkey for cursing God.

BARAK: Jewish captain; associate of Deborah.

BARUCH: Secretary to Jeremiah.

BATHSHEBA: Wife of Uriah; later, wife of David.

BELSHAZZAR: Crown prince of Babylon.

BENAIAH: Warrior of David; procured Solomon's throne.

BEN-HADAD: Name of several kings of Damascus.

BENJAMIN: Son of Jacob and Rachel.

BEZALEEL: Chief architect of the tabernacle.

BILDAD: Comforter of Job.

BILBAH: Servant of Rachel; mistress of Jacob.

BOAZ: Husband of Ruth; father of Obed.

CAIN: Son of Adam and Eve; slain by Abel; father of Enoch.

CAINAN: Son of Enos.

CALEB: Spy sent out by Moses.

Canaan; father of Achsa.

CANAAN: Son of Ham.

CHILION: Son of Elimelech; husband of Orah.

CUSH: Son of Ham; father of Nimrod.

DAN: Son of Jacob and Bilhah.

DANIEL: Prophet; saved from the lions.

DEBORAH: Hebrew prophetess; Israelites conquer Canaanites.

DELILAH: Mistress and betrayer of Samson.

ELAM: Son of Shem.

ELEAZAR: Son of Aaron; succeeded him as high priest.

ELI: High priest and judge; teacher of Samuel; father of Hophni and Phineas.

ELIAKIM: Chief minister of Hezekiah.

ELIEZER: Servant of Abraham.

ELIHU: Comforter of Job.

JAHA (or **ELIAS**): Prophet; went to heaven in chariot of fire.

MELECH: Husband of Naomi; father of Elion and Mahlon.

PHAZ: Comforter of Job.

SHA (or **ELISEUS**): Prophet; successor of Elijah.

KANAH: Husband of Hannah; father of Samuel.

NOCH: Son of Cain.

NOCH: Father of Methuselah.

OS: Son of Seth; father of Cainan.

RAIM: Son of Joseph.

U: Son of Isaac and Rebecca; sold himself into slavery to his brother Jacob.

HER: Jewish wife of Ahasuerus; helped Jews from Haman's plotting.

E: First woman; created from rib of Adam.

A (or **ESDRAS**): Hebrew scribe and prophet.

D: Son of Jacob and Zilpah.

IAZI: Servant of Elisha.

ION: Israelite hero; defeated Midianites.

ATH: Philistine giant; slain by David.

AR: Handmaid of Sarah; concubine of Abraham; mother of Ishmael.

EGITH: Mother of Adonijah.

M: Son of Noah; father of Cush, Mizraim, Phut, and Canaan.

MAN: Chief minister of Ahasuerus; executed on gallows prepared for Mordecai.

NAH: Wife of Elkanah; mother of Samuel.

NUN: King of Ammonites.

AN: Brother of Abraham; father of Isaac.

MAEL: King of Damascus.

HEZI-BAH: Wife of Hezekiah; mother of Manasseh.

AM: King of Tyre.

OPERNES: General of Nebuchadnezzar; slain by Judith.

PHI: Son of Eli.

AB: Hebrew patriarch; son of Abraham and Sarah; half brother of Ishmael; brother of Rebecca; father of Esau and Jacob.

MAEL: Son of Abraham and Hagar; brother of Isaac.

ACHAR: Son of Jacob and Leah.

AMAR: Son of Aaron.

AL: Son of Lamech and Adah.

IN: King of Hazor.

AB: Hebrew patriarch, founder of the tribe of Issachar; husband of Rachel; father of Asher, Benjamin, Gad, Issachar, Joseph, Judah, Naphtali, Reuben, Simeon, and Zebulun.

L: Slayer of Sisera.

HETH: Son of Noah.

ADADA: High priest; husband of Abimelech; revolted against Athaliah and made Joash King of Judah.

JEHOSHABEATH (or **JEHOSHEBA**): Daughter of Jehoram of Judah; wife of Jehoiada.

JEPHTHAH: Judge in Israel; sacrificed his only daughter because of vow.

JESSE: Son of Obed; father of David.

JETHRO: Midianite priest; father of Zipporah.

JEZEBEL: Phoenician princess; wife of Ahab; mother of Ahaziah, Athaliah, and Jehoram.

JOAB: Commander in chief under David; slayer of Abner, Absalom, and Amasa.

JOB: Patriarch; underwent many afflictions; comforted by Bildad, Eliphaz, and Zophar.

JOCHEBED: Wife of Amram.

JONAH: Prophet; cast into sea and swallowed by great fish.

JONATHAN: Son of Saul; friend of David.

JOSEPH: Son of Jacob and Rachel; sold into slavery by his brothers; husband of Asenath; father of Ephraim and Manasseh.

JOSHUA: Successor of Moses; son of Nun.

JUBAL: Son of Lamech and Adah.

JUDAH: Son of Jacob and Leah.

JUDITH: Slayer of Holofernes.

KISH: Father of Saul.

LABAN: Father of Leah and Rachel.

LAMECH: Son of Methuselah; father of Noah.

LAMECH: Husband of Adah and Zillah; father of Jabal, Jubal, and Tubal-Cain.

LEAH: Daughter of Laban; wife of Jacob.

LEVI: Son of Jacob and Leah.

LOT: Son of Haran; escaped destruction of Sodom.

MAACAH: Mother of Absalom and Tamar.

MAHLON: Son of Elimelech; first husband of Ruth.

MANASSEH: Son of Joseph.

MELCHIZEDEK: King of Salem.

METHUSELAH: Patriarch; son of Enoch; father of Lamech.

MICHAL: Daughter of Saul; wife of David.

MIRIAM: Prophetess; daughter of Amram; sister of Aaron and Moses.

MIZRAIM: Son of Ham.

MORDECAI: Uncle of Esther; with her aid, saved Jews from Haman's plotting.

MOSES: Prophet and lawgiver; son of Amram; brother of Aaron and Miriam; husband of Zipporah.

NAAMAN: Syrian captain; cured of leprosy by Elisha.

NABAL: Husband of Abigail.

NABOTH: Owner of vineyard; stoned to death because he would not sell it to Ahab.

NADAB: Son of Aaron.

NAHOR: Father of Terah.

NAOMI: Wife of Elimelech; mother-in-law of Ruth.

NAPHTALI: Son of Jacob and Bilhah.

NATHAN: Prophet; reproved David for causing Uriah's death.

NEBUCHADNEZZAR (or **NEBUCHADREZZAR**): King of Babylon; destroyer of Jerusalem.

NEHEMIAH: Jewish leader; empowered by Artaxerxes to rebuild Jerusalem.

NIMROD: Mighty hunter; son of Cush.

NOAH: Patriarch; Son of Lamech; escaped Deluge by building Ark; father of Ham, Japheth and Shem.

NUN (or **NON**): Father of Joshua.

OBED: Son of Boaz; father of Jesse.

OG: King of Bashan.

ORPAH: Wife of Chilion.

OTHNIEL: Kenezite; judge of Israel; husband of Achsa.

PHINEHAS: Son of Eleazer.

PHINEHAS: Son of Eli.

PHUT (or **PUT**): Son of Ham.

POTIPHAR: Egyptian official; bought Joseph.

RACHEL: Wife of Jacob.

REBECCA (or **REBEKAH**): Wife of Isaac.

REUBEN: Son of Jacob and Leah.

RUTH: Wife of Mahlon, later of Boaz; daughter-in-law of Naomi.

SAMSON: Judge of Israel; famed strength; betrayed by Delilah.

SAMUEL: Hebrew judge and prophet; son of Elkanah.

SARAH (or **SARA, SARAI**): Wife of Abraham.

SENNACHERIB: King of Assyria.

SETH: Son of Adam; father of Enosh.

SHEM: Son of Noah; father of Elam.

SIMEON: Son of Jacob and Leah.

SISERA: Canaanite captain; killed Jael.

TAMAR: Daughter of David and Judah; ravished by Amnon.

TERAH: Son of Nahor; father of Abraham.

TUBAL-CAIN: Son of Lamech and Zillah.

URIAH: Husband of Bathsheba; died in battle by David.

VASHTI: Wife of Ahasuerus; set aside by him.

ZADOK: High priest during David's reign.

ZEBULUN (or **ZABULON**): Son of Jacob and Leah.

ZILLAH: Wife of Lamech.

ZILPAH: Servant of Leah; mistress of Jacob.

ZIPPORAH: Daughter of Jethro; wife of Moses.

ZOPHAR: Comforter of Job.

Kings of Judah and Israel

Kings Before Division of Kingdom

SAUL: First King of Israel; son of Kish; father of Ish-bosheth, Jonathan and Michal.

ISH-BOSHETH (or **ESHBAAL**): King of Israel; son of Saul.

DAVID: King of Judah; later of Israel; son of Jesse; husband of Abigail, Ahinoam, Bathsheba, Michal, etc.; father of Absalom, Adonijah, Amnon, Solomon, Tamar, etc.

SOLOMON: King of Israel and Judah; son of David; father of Rehoboam.

REHOBAM: Son of Solomon; during his reign the kingdom was divided into Judah and Israel.

UZZIAH (or **AZARIAH**): Son of Amaziah.

JOTHAM: Regent, later King; son of Uzziah.

AHAZ: Son of Jotham.

HEZEKIAH: Son of Ahab; husband of Hephzi-Bah.

MANASSEH: Son of Hezekiah; husband of Hephzi-Bah.

AMON: Son of Manasseh.

JOSIAH (or **JOSIAS**): Son of Amon; husband of Jedidah.

JEHOAHASH (or **JOAHASH**): Son of Josiah.

JEHOIAKIM: Son of Josiah.

JEHOIACHIN: Son of Jehoiakim; son of Josiah; overthrown by Babylonians under Nebuchadnezzar.

ZEDEKIAH: Son of Josiah; king of Judah; overthrown by Babylonians under Nebuchadnezzar.

Kings of Judah (Southern Kingdom)

REHOBAM: First King.

ABIJAH (or **ABIJAM** or **ABIA**): Son of Rehoboam.

ASA: Probably son of Abijah.

JEHOSHAPHAT: Son of Asa.

JEHORAM (or **JORAM**): Son of Jehoshaphat; husband of Athaliah.

AHAZIAH: Son of Jehoram and Athaliah.

ATHALIAH: Daughter of King Ahab of Israel and Jezebel; wife of Jehoram.

JOASH (or **JEHOASH**): Son of Ahaziah.

AMAZIAH: Son of Joash.

Kings of Israel (Northern Kingdom)

JEROBOAM I: Led secession of Israel from Judah.

NADAB: Son of Jeroboam I.

BAASHA: Overthrew Nadab.

ELAH: Son of Baasha.

ZIMRI: Overthrew Elah.

OMRI: Overthrew Zimri.

AHAB: Son of Omri; husband of Jezebel.

AHAZIAH: Son of Ahab.

JEHORAM (or **JORAM**): Son of Ahab.

JEHU: Overthrew Jehoram.

JEHOAHASH (or **JOAHASH**): Son of Jehoram.

JEHOASH (or **JOASH**): Son of Jehoram.

ROBOAM II: Son of Jehoash.
 ZACHARIAH: Son of Jeroboam II.
 SHALLUM: Overthrew Zechariah.
 MENAHEM: Overthrew Shallum.

PEKAHIAH: Son of Menahem.
 PEKAH: Overthrew Pekahiah.
 HOSHEA: Overthrew Pekah; kingdom
 overthrown by Assyrians under Sargon II.

Prophets

Major

ISAIAH	JEREMIAH	EZEKIEL	DANIEL
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Minor

HOSEA	OBADIAH	NAHUM	HAGGAI
JOEL	JONAH	HABAKKUK	ZECHARIAH
AMOS	MICAH	ZEPHANIAH	MALACHI

Foreign Phrases

(NOTE: The English meanings given are not necessarily literal translations.)

ABOVO: From the beginning.
 SIT OMEN: Hope this is no bad luck.
 QUO ANIMO: Undisturbed in mind.
 VALOREM: According to its value.
 EA JACTA EST: The die is cast.
 MA MATER: One's college or school.
 TER EGO: Other self.
 ICUS CURIAE: Friend of the court.
 NO DOMINI: Year of our Lord.
 CANTO: A style of singing marked
 tucosity and beauty.
 TE NOIRE: Particular nemesis.
 NA FIDE: In good faith; genuine.
 PE DIEM: Enjoy today.
 SUS BELLI: Cause of war.
 VEAT EMPTOR: Buy at your own

RPUS DELICTI: Fundamental fact or
 necessary to commission of a crime.
 BONO: To whose advantage?
 M GRANO SALIS: With a grain of

FACTO: As a matter of fact; because
 is fact.

O GRATIAS: Thanks be to God.
 IS EX MACHINA: Artificially pro-
 to bring a solution of some extreme
 lity.

VE HOMO: This is the man.
 ARE HUMANUM (EST): To err is
 a.

TINA LENTE: Make haste slowly.
 T LUX: Let there be light.
 US ACHATES: Faithful friend.
 GRANTE DELICTO: Caught in the

BEAS CORPUS: Common-law writ to
 a person before a court or judge.

JACET: Here lies. . . .

POLLOI: The common people.

JORIS CAUSA: For the sake of

HORS D'OEUVRES: Appetizers.
 IN VINO VERITAS: In wine there is
 truth.

IPSE DIXIT: An assertion made but not
 proved.

IPSO FACTO: By the very fact.
 JEUNESSE DOREE: Gilded youth.
 LABOR OMNIA VINCIT: Work over-
 comes all things.

LAISSEZ FAIRE: Noninterference.
 MIRABILE DICTU: Wonderful to relate.
 MULTUM IN PARVO: Much in little.
 NIL ADMIRARI: To be astonished at
 nothing.

NOLENS, VOLENS: Willy-nilly.
 O TEMPORA! O MORES!: What sad
 times and customs!

PERSONA GRATA: A favored person.
 POST MORTEM: After death.
 PRO BONO PUBLICO: For the public
 welfare.

PRO TEMPORE: For the time being.
 RARA AVIS: Extraordinary person or
 thing.

REQUIESCAT IN PACE: Rest in peace.
 SAVOIR FAIRE: Know-how; manners
 for all occasions.

SINE DIE: With no day set for the next
 meeting.

SINE QUA NON: Indispensable.
 SPIRITUS FRUMENTI: Alcohol.
 STATUS (IN) QUO: State in which any-
 thing is.

SUI GENERIS: In a class by itself.
 SURSUM CORDA: Lift up your hearts.
 TEMPUS FUGIT: Time flies.
 ULTIMA THULE: The limit in an ideal
 way.

VAE VICTIS: Woe to the conquered.
 VENI, VIDI, VICI: I came, I saw, I
 conquered.

Greek and Roman Mythology

(Most of the Greek deities were adopted by the Romans, although in many cases there was a change of name. In the list below, information is given under the Greek name; the name in parentheses is Latin equivalent. However, all Latin names are listed with cross references to the Greek ones. In addition there are several deities which were exclusively Roman.)

- ACHERON:** *See* Rivers.
- ACHILLES:** Greek warrior; slew Hector at Troy; slain by Paris, who wounded him in his vulnerable heel.
- ACTAEON:** Hunter; surprised Artemis bathing; changed by her to stag and killed by his dogs.
- ADMETUS:** King of Thessaly; his wife, Alcestis, offered to die in his place.
- ADONIS:** Beautiful youth loved by Aphrodite.
- AEACUS:** One of three judges of dead in Hades; son of Zeus.
- AETES:** King of Colchis; father of Medea; keeper of Golden Fleece.
- AEGEUS:** Father of Theseus; believing Theseus killed in Crete, he drowned himself, Aegean Sea named for him.
- AEGISTHUS:** Son of Thyestes; slew Atreus; with Clytemnestra, his paramour, slew Agamemnon; slain by Orestes.
- AEGYPTUS:** Brother of Danaüs; his sons, except Lynceus, slain by Danaïdes.
- AENEAS:** Trojan; son of Anchises and Aphrodite; after fall of Troy, led his followers eventually to Italy; loved and deserted Dido.
- AEOLUS:** *See* Winds.
- AESCUAPIUS:** *See* Asclepius.
- AESON:** King of Iolus; father of Jason; overthrown by his brother Pellas; restored to youth by Medea.
- AETHER:** Personification of sky.
- AETHRA:** Mother of Theseus.
- AGAMEMNON:** King of Mycenae; son of Atreus; brother of Menelaus; leader of Greeks against Troy; slain on his return home by Clytemnestra and Aegisthus.
- AGLAIA:** *See* Graces.
- AJAX:** Greek warrior; killed himself at Troy because Achilles' armor was awarded to Odysseus.
- ALCESTIS:** Wife of Admetus; offered to die in his place but saved from death by Hercules.
- ALCMENE:** Wife of Amphitryon; mother by Zeus of Hercules.
- ALCYONE:** *See* Pleiades.
- ALECTO:** *See* Furies.
- ALECTRYON:** Youth changed by Ares into cock.
- ALTHAEA:** Wife of Oeneus; mother of Meleager.
- AMAZONS:** Female warriors in Asia Minor; supported Troy against Greeks.
- AMOR:** *See* Eros.
- AMPHION:** Musician; husband of Meliboea; used charmed stones to build fortifications at Thebes.
- AMPHITRITE:** Sea goddess; wife of Poseidon.
- AMPHITRYON:** Husband of Alcmene.
- ANCHISES:** Father of Aeneas.
- ANCILE:** Sacred shield that fell from heavens; palladium of Rome.
- ANDRAEMON:** Husband of Dryope.
- ANDROMACHE:** Wife of Hector.
- ANDROMEDA:** Daughter of Cepheus; chained to cliff for monster to devour; rescued by Perseus.
- ANTEIA:** Wife of Proetus; tried to seduce Bellerophon to elope with her.
- ANTEROS:** God who avenged unrequited love.
- ANTIGONE:** Daughter of Oedipus; accompanied him to Colonus; performed burial rite for Polynices and was left alive.
- ANTINOÜS:** Leader of suitors of Helen; slain by Odysseus.
- APHRODITE (VENUS):** Goddess of love and beauty; daughter of Zeus; mother of Eros.
- APOLLO:** God of beauty, poetry, music; later identified with Helios as Phœbus Apollo; son of Zeus and Leto.
- AQUILO:** *See* Winds.
- ARACHNE:** Maiden who challenged Athena to weaving contest; changed into spider.
- ARES (MARS):** God of war; son of Zeus and Hera.
- ARGO:** Ship in which Jason and the Argonauts sailed to Colchis for Golden Fleece.
- ARGUS:** Monster with hundred eyes; slain by Hermes; his eyes placed by Athena into peacock's tail.
- ARIADNE:** Daughter of Minos; helped Theseus in slaying Minotaur; deserted him on island of Naxos and married Dionysus.
- ARION:** Musician; thrown overboard by pirates but saved by dolphin.
- ARTEMIS (DIANA):** Goddess of the huntress; twin sister of Apollo.
- ASCLEPIUS (AESCUAPIUS):** Son of Apollo; slain by Zeus for curing the dead; later deified as god of medicine; known as Asklepius.
- ASTARTE:** Phœnician goddess of love; variously identified with Aphrodite, Venus, and Artemis.

TRAEAE: Goddess of Justice; daughter of Themis.

ALANTA: Princess who challenged suitors to a foot race; Hippomenes won and married her.

HENA (MINERVA): Goddess of wisdom known poetically as Pallas Athene; fully armed from head of Zeus.

AS: Titan; held world on his shoulders as punishment for warring against son of Iapetus.

REUS: King of Mycenae; father of Agamemnon and Agamemnon; brother of Agamemnon, three of whose sons he slew and sent to him at banquet; slain by Agamemnon.

ROPOS: See Fates.

RORA: See Eos.

STER: See Winds.

ERNUS: Infernal regions; name derived from small vaporous lake near Vesuvius which was fabled to kill birds and animals.

CHUS: See Dionysus.

LEROPHON: Corinthian hero; killed Pegasus with aid of Pegasus; tried to escape on Pegasus and was thrown to death.

LONA: Roman goddess of war.

REAS: See Winds.

AREUS: Monster of hundred hands; son of Uranus and Gaea.

SEIS: Captive maiden given to Agamemnon; taken by Agamemnon in exchange for loss of Chryseis, which caused Agamemnon to cease fighting, until death of Chryseis.

MUS: Brother of Europa; planter of corn seeds from which first Thebans came.

LOPE: See Muses.

YPSO: Sea nymph; kept Odysseus on island Ogygia for seven years.

SANDRA: Daughter of Priam; priestess who was never believed; slain by Agamemnon.

TOR: See Dioscuri.

AENO: See Pleiades.

TAURS: Beings half man and half bull; lived in mountains of Thessaly.

HALUS: Hunter; accidentally killed Procris with his spear.

HEUS: King of Ethiopia; father of Agamemnon.

BERUS: Three-headed dog guarding entrance to Hades.

ES: See Demeter.

OS: Formless void; personified as Chaos and gods.

RON: Boatman on Styx who carried souls of dead to Hades; son of Erebus.

RYBDIS: Female monster; personification of whirlpool.

CHIMERA: Female monster with head of lion, body of goat, tail of serpent; killed by Bellerophon.

CHIRON: Most famous of centaurs.

CHRONOS: Personification of time.

CHRYSEIS: Captive maiden given to Agamemnon; his refusal to accept ransom from her father Chryses caused Apollo to send plague on Greeks besieging Troy.

CIRCE: Sorceress; daughter of Helios; changed Odysseus' men into swine.

CLIO: See Muses.

CLOTHO: See Fates.

CLYTEMNESTRA: Wife of Agamemnon, whom she slew with aid of her paramour, Aegisthus; slain by her son Orestes.

COCYTUS: See Rivers.

CREON: Father of Jocasta; forbade burial of Polynices; ordered burial alive of Antigone.

CREÛSA: Princess of Corinth, for whom Jason deserted Medea; slain by Medea, who sent her poisoned robe; also known as Glauke.

CREÛSA: Wife of Aeneas; died fleeing Troy.

CRONUS (SATURN): Titan; god of harvests; son of Uranus and Gaea; dethroned by his son Zeus.

CUPID: See Eros.

CYBELE: Anatolian nature goddess; adopted by Greeks and identified with Rhea.

CYCLOPES: Race of one-eyed giants (singular: Cyclops).

DAEDALUS: Athenian artificer; father of Icarus; builder of Labyrinth in Crete; devised wings attached with wax for him and Icarus to escape Crete.

DANAË: Princess of Argos; mother of Perseus by Zeus, who appeared to her in form of golden shower.

DANAÏDES: Daughters of Danaë; at his command, all except Hypermnestra slew their husbands, the sons of Aegyptus.

DANAÛS: Brother of Aegyptus; father of Danaïdes; slain by Lynceus.

DAPHNE: Nymph; pursued by Apollo; changed to laurel tree.

DECUMA: See Fates.

DEINO: See Graeae.

DEMETER (CERES): Goddess of agriculture; mother of Persephone.

DIANA: See Artemis.

DIDO: Founder and queen of Carthage; stabbed herself when deserted by Aeneas.

DIOMEDES: Greek hero; with Odysseus, entered Troy and carried off Palladium, sacred statue of Athena.

DIOMEDES: Owner of man-eating horses, which Hercules, as ninth labor, carried off.

DIONE: Titan goddess; mother by Zeus of Aphrodite.

DIONYSUS (BACCHUS): God of wine; son of Zeus and Semele.

DIOSCURI: Twins Castor and Pollux; sons of Leda by Zeus.

DIS: See Hades.

DRYADS: Wood nymphs.

DRYOPE: Maiden changed to Hamadryad.

ECHO: Nymph who fell hopelessly in love with Narcissus; faded away except for her voice.

ELECTRA: Daughter of Agamemnon and Clytemnestra; sister of Orestes; urged Orestes to slay Clytemnestra and Aegisthus.

ELECTRA: See Pleiades.

ELYSIUM: Abode of blessed dead.

ENDYMION: Mortal loved by Selene.

ENYO: See Graeae.

EOS (AURORA): Goddess of dawn.

EPIMETHEUS: Brother of Prometheus; husband of Pandora.

ERATO: See Muses.

EREBUS: Spirit of darkness; son of Chaos.

ERINYES: See Furies.

ERIS: Goddess of discord.

EROS (AMOR or CUPID): God of love; son of Aphrodite.

ETEOCLES: Son of Oedipus, whom he succeeded to rule alternately with Polynices; refused to give up throne at end of year; he and Polynices slew each other.

EUMENIDES: See Furies.

EUPHROSYNE: See Graces.

EUROPA: Mortal loved by Zeus, who, in form of white bull, carried her off to Crete.

EURUS: See Winds.

EURYALE: See Gorgons.

EURYDICE: Nymph; wife of Orpheus.

EURYSTHEUS: King of Argos; imposed twelve labors on Hercules.

EUTERPE: See Muses.

FATES: Goddesses of destiny: Clotho (Spinner of thread of life), Lachesis (Determiner of length), and Atropos (Cutter of thread); also called Moirae. Identified by Romans with their goddesses of fate; Nona, Decuma, and Morta; called Parcae.

FAUNS: Roman deities of woods and groves.

FAUNUS: See Pan.

FAVONIUS: See Winds.

FLORA: Roman goddess of flowers.

FORTUNA: Roman goddess of fortune.

FURIES: Avenging spirits: Alecto, Megaera, and Tisiphone; known also as Erinyes or Eumenides.

GAEA: Goddess of earth; daughter of Chaos; mother of Titans; known also as Ge, Gaia, etc.

GALATEA: Statue of maiden carved from ivory by Pygmalion; given life by Aphrodite.

GALATEA: Sea nymph; loved by Polyphemus.

GANYMEDE: Beautiful boy; succeeded to Hebe as cupbearer of gods.

GLAUCUS: Mortal who became sea nymph by eating magic grass.

GLAUKE: See Cretusa.

GOLDEN FLEECE: Fleece from ram that flew Phrixos to Colchis; Aëtes placed under guard of dragon; carried off by Jason.

GORGONS: Female monsters: Eury Medusa, and Stheno; had snakes for hair; their glances turned mortals to stone; Medusa.

GRACES: Beautiful goddesses: Euphrosyne (Joy), and Daphne (Bloom); daughters of Zeus.

GRAEAE: Sentinels for Gorgons: Enyo, and Pephredo; had one eye each; them, which passed from one to another.

HADES (DIS): Name sometimes used for Pluto; also, abode of dead, ruled by Pluto.

HAEMON: Son of Creon; promised to marry Antigone; killed himself in the tomb.

HAMADRYADS: Tree nymphs; lived in trees they inhabited.

HARPIES: Monsters with heads of women and bodies of birds.

HEBE (JUVENTAS): Goddess of youth; cupbearer of gods before Gany; daughter of Zeus and Hera.

HECATE: Goddess of sorcery and magic; craft.

HECTOR: Son of Priam; slayer of Hector; slain by Achilles.

HECUBA: Wife of Priam.

HELEN: Fairest woman in world; daughter of Zeus and Leda; wife of Menelaus; carried to Troy by Paris, causing the Trojan War.

HELIADS: Daughters of Helios; mourned for Phaëthon and were changed to poplar trees.

HELIOS (SOL): God of sun; later identified with Phoebus Apollo.

HELLE: Sister of Phrixos; fell from Golden Fleece; water where she fell named Hellespont.

HEPHAESTUS (VULCAN): God of fire; celestial blacksmith; son of Zeus and Hera; husband of Aphrodite.

HERA (JUNO): Queen of heaven; wife of Zeus.

HERCULES: Hero and strong man; son of Zeus and Alcmena; performed twelve labors.

or deeds to be free from bondage Eurystheus; after death, his mortal was destroyed, and he became immortal. Also known as Herakles or Heracles; (1) killing Nemean lion; (2) Lernaean Hydra; (3) capturing Erymanthian boar; (4) capturing Cerynean hind; (5) killing man-eating Stymphalian birds; (6) procuring girdle of Hippolyte; (7) taming Augean stables; (8) capturing the bull; (9) capturing man-eating of Diomedes; (10) capturing cattle of the Cyclops; (11) procuring golden apples of the Hesperides; (12) bringing Cerberus up from the underworld.

HERMES (MERCURY): God of physical strength and thieves; messenger of gods; son of Zeus and Maia.

HELENE: Priestess of Aphrodite; Leander swam Hellespont nightly to see her; she drowned herself at his death.

HECATE: Evening star.

HEPHAESTUS (VESTA): Goddess of hearth; wife of Zeus.

HEPOLYTE: Queen of Amazons; wife of Theseus.

HEPOLYTUS: Son of Theseus and Hippolyte; falsely accused by Phaedra of trying to kidnap her; slain by Poseidon at the fall of Theseus.

HEPHAIOS (HIMENOS): Husband of Atalanta; he beat in foot race by dropping apples, which she stopped to pick up.

HEPHAIOS (HIMENOS): Beautiful youth accidentally killed by Apollo, who caused him to spring up from his blood.

HEPHAIOS (HIMENOS): Nine-headed monster in marshes; slain by Hercules.

HEPHAESTUS: Personification of health.

HEPHAESTUS: God of marriage.

HEPHAESTUS: Titan; early sun god; father of Helios.

HEPHAESTUS: Daughter of Danaüs; he tried to kill her husband Lynceus.

HEPHAESTUS (SOMNUS): God of sleep.

HEPHAESTUS: Titan; father of Atlas, Epimetheus and Prometheus.

HEPHAESTUS: Son of Daedalus; flew too near the sun; wax-attached wings and fell into the sea; he was drowned.

HEPHAESTUS: Mortal maiden loved by Zeus; she was seduced by Hera into heifer.

HEPHAESTUS: King of Lycia; sent Bellerophon to slay Chimera.

HEPHAESTUS: Daughter of Agamemnon; she was sacrificed to Artemis at Aulis; she was saved by Artemis to Tauris where she became a priestess; escaped from there with the Argonauts.

HEPHAESTUS: Goddess of rainbow; messenger of Zeus and Hera.

HEPHAESTUS: Daughter of Oedipus; sister of Antigone.

IULUS: Son of Aeneas.

IXION: King of Lapithae; for making love to Hera he was bound to endlessly revolving wheel in Tartarus.

JANUS: Roman god of gates and doors; represented with two opposite faces.

JASON: Son of Aeson; to gain throne of Iolcus from Pelias, went to Colchis and brought back Golden Fleece; married Medea; deserted her for Creüsa.

JOCASTA: Wife of Laius; mother of Oedipus; unwittingly became wife of Oedipus; hanged herself when relationship was discovered.

JUNO: See Hera.

JUPITER: See Zeus.

JUVENTAS: See Hebe.

LACHESIS: See Fates.

LAIUS: Father of Oedipus, by whom he was slain.

LAOCOÖN: Priest of Apollo at Troy; warned against bringing wooden horse into Troy; destroyed with his two sons by serpents sent by Athena.

LARES: Roman ancestral spirits protecting descendants and homes.

LAVINIA: wife of Aeneas after defeat of Turnus.

LEANDER: Swam Hellespont nightly to see Hero; drowned in storm.

LEDA: Mortal loved by Zeus in form of Swan; mother of Helen, Clytemnestra, Dioscuri.

LETHE: See Rivers.

LETO (LATONA): Mother by Zeus of Artemis and Apollo.

LUCINA: Roman goddess of childbirth; identified with Juno.

LYNCEUS: Son of Aegyptus; husband of Hypermnestra; slew Danaüs.

MAIA: Daughter of Atlas; mother of Hermes.

MAIA: See Pleiades.

MANES: Souls of dead Romans, particularly of ancestors.

MARS: See Ares.

MARSYAS: Shepherd; challenged Apollo to music contest and lost; flayed alive by Apollo.

MEDEA: Sorceress; daughter of Aeëtes; helped Jason obtain Golden Fleece; when deserted by him for Creüsa, killed her children and Creüsa.

MEDUSA: Gorgon; slain by Perseus, who cut off her head.

MEGAERA: See Furies.

MELEAGER: Son of Althaea; his life would last as long as brand burning at his birth; Althaea quenched and saved it but destroyed it when Meleager slew his uncles.

MELPOMENE: See Muses.

MEMNON: Ethiopian king; made immortal by Zeus; son of Tithonus and Eos.

MENELAUS: King of Sparta; son of Atreus; brother of Agamemnon; husband of Helen.

MERCURY: See Hermes.

MEROPE: See Pleiades.

MEZENTIUS: Cruel Etruscan king; ally of Turnus against Aeneas; slain by Aeneas.

MIDAS: King of Phrygia; given gift of turning to gold all he touched.

MINERVA: See Athena.

MINOS: King of Crete; after death, one of three judges of dead in Hades; son of Zeus and Europa.

MINOTAUR: Monster, half man and half beast, kept in Labyrinth in Crete; slain by Theseus.

MNEMOSYNE: Goddess of memory; mother by Zeus of Muses.

MOIRAE: See Fates.

MOMUS: God of ridicule.

MORPHEUS: God of dreams.

MORS: See Thanatos.

MORTA: See Fates.

MUSES: Goddesses presiding over arts and sciences: Calliope (epic poetry), Clio (history), Erato (lyric and love poetry), Euterpe (music), Melpomene (tragedy), Polymnia or Polyhymnia (sacred poetry), Terpsichore (choral dance and song), Thalia (comedy and bucolic poetry), Urania (astronomy); daughters of Zeus and Mnemosyne.

NAIADS: Nymphs of waters, streams, and fountains.

NAPAEAE: Wood nymphs.

NARCISSUS: Beautiful youth loved by Echo; in punishment for not returning her love, he was made to fall in love with his image reflected in pool; pined away and became flower.

NEMESIS: Goddess of retribution.

NEOPTOLEMUS: Son of Achilles; slew Priam; also known as Pyrrhus.

NEPTUNE: See Poseidon.

NEREIDS: Sea nymphs; attendants on Poseidon.

NESTOR: King of Pylos; noted for wise counsel in expedition against Troy.

NIKE: Goddess of victory.

NIOBE: Daughter of Tantalus; wife of Amphion; her children slain by Apollo and Artemis; changed to stone but continued to weep her loss.

NONA: See Fates.

NOTUS: See Winds.

NOX: See Nyx.

NYMPHS: Beautiful maidens; inferior deities of nature.

NYX (NOX): Goddess of night.

OCEANIDS: Ocean nymphs; daughters of Oceanus.

OCEANUS: Eldest of Titans; god of waters.

ODYSSEUS (ULYSSES): King of Ithaca; husband of Penelope; wandered ten years after fall of Troy before arriving home.

OEDIPUS: King of Thebes; son of Laius and Jocasta; unwittingly murdered his father and married Jocasta; tore his eyes out when relationship was discovered.

OENONE: Nymph of Mount Ida; wife of Paris, who abandoned her; refused to marry him when he was poisoned by an arrow from Philoctetes at Troy.

OPS: See Rhea.

OREADS: Mountain nymphs.

ORESTES: Son of Agamemnon and Clytemnestra; brother of Electra; slew Clytemnestra and Aegisthus; pursued by the Furies until his purification by Apollo.

ORION: Hunter; slain by Artemis; constellation made heavenly constellation.

ORPHEUS: Famed musician; son of Apollo and Muse Calliope; husband of Eurydice.

PALES: Roman goddess of shepherds and herdsmen.

PALINURUS: Aeneas' pilot; fell from the shipboard in his sleep and was drowned.

PAN (FAUNUS): God of woods, fields; part goat; son of Hermes.

PANDORA: Opener of box containing human ills; mortal wife of Epimetheus.

PARCAE: See Fates.

PARIS: Son of Priam; gave apple of discord to Aphrodite, for which she seduced him to carry off Helen; slew Achilles at Troy; slain by Philoctetes.

PATROCLUS: Great friend of Achilles; wore Achilles' armor and was slain by Hector.

PEGASUS: Winged horse that sprang from Medusa's body at her death; slain by Bellerophon when he slew Chimera.

PELIAS: King of Iolcus; seized throne from his brother Aeson; sent Jason to fetch Golden Fleece; slain unwittingly by his daughters at instigation of Medea.

PELOPS: Son of Tantalus; his wife was cooked and served him to gods; restored to life; Peloponnesus named for him.

PENATES: Roman household gods.

PENELOPE: Wife of Odysseus; waited faithfully for him for ten years while he was fighting off numerous suitors.

PEPHREDO: See Graeae.

PERIPHETES: Giant; son of Hecuba; slain by Theseus.

PERSEPHONE (PROSERPINE): Daughter of Zeus; wife of Pluto; goddess of infernal regions.

PERSEUS: Son of Zeus and Danaë; slew Medusa; rescued Andromeda from the sea monster and married her.

PHAEDRA: Daughter of Minos; wife of Theseus; falsely accused Hippolytus of rape and tried to kidnap her.

ETHON: Son of Helios; drove his sun chariot and was struck down before he set world on fire.

LOCTETES: Greek warrior who pos- Hercules' bow and arrows; slew Paris with poisoned arrow.

NEUS: Betrothed of Andromeda; to slay Perseus but turned to stone dusa's head.

EGETHON: See Rivers.

SPHOR: Morning star.

IXOS: Brother of Helle; carried by Golden Fleece to Colchis.

THOUS: Son of Ixion; friend of us; tried to carry off Persephone from bound to enchanted rock by Pluto.

ADES: Alcyone, Celaeno, Electra, Merope, Sterope or Asterope, Tay- seven daughters of Atlas; trans- into heavenly constellation, of six stars are visible (Merope is said be hidden in shame for loving a).

FO (DIS): God of Hades; brother s.

TUS: God of wealth.

LUX: See Dioscuri.

YMNIA: See Muses.

YNICES: Son of Oedipus; he and his Eteocles killed each other; burial ridden by Creon, performed by his Antigone.

YPHEMUS: Cyclops; devoured six of is' men; blinded by Odysseus.

YXENA: Daughter of Priam; be- to Achilles, whom Paris slew at betrothal; sacrificed to shade of s.

ONA: Roman goddess of fruits.

TUS: Sea god; son of Gaea.

IDON (NEPTUNE): God of sea; of Zeus.

M: King of Troy; husband of ; ransomed Hector's body from ; slain by Neoptolemus.

PUS: God of regeneration.

ERIS: Wife of Cephalus, who acci- y slew her.

ERUSTES: Giant; stretched or cut of victims to make them fit iron in by Theseus.

TUS: Husband of Antea; sent Bel- to Iobates to be put to death.

ETHEUS: Titan; stole fire from for man. Zeus punished him by g him to rock in Caucasus where s devoured his liver daily.

EUS: Sea god; assumed various when called on to prophesy.

HE: Beloved of Eros; punished by Aphrodite; made immortal and with Eros.

ALION: King of Cyprus; carved statue of maiden which Aphrodite e as Galatea.

PYRAMUS: Babylonian youth; made love to Thisbe through hole in wall; think- ing Thisbe slain by lion, killed himself.

PYRRHUS: See Neoptolemus.

PYTHON: Serpent born from slime left by Deluge; slain by Apollo.

QUIRINUS: Roman war god.

REMUS: Brother of Romulus; slain by him.

RHADAMANTHUS: One of three judges of dead in Hades; son of Zeus and Europa.

RHEA (OPS): Daughter of Uranus and Gaea; wife of Cronus; mother of Zeus; identified with Cybele.

RIVERS OF UNDERWORLD: Acheron (woe), Cocytus (wailing), Lethe (forget- fulness), Phlegethon (fire), Styx (across which souls of dead were ferried by Char- on).

ROMULUS: Founder of Rome; he and Remus suckled in infancy by she-wolf; slew Remus; deified by Romans.

SARPEDON: King of Lycia; son of Zeus and Europa; slain by Patroclus at Troy.

SATURN: See Cronus.

SATYRS: Hoofed demigods of woods and fields; companions of Dionysus.

SCIRON: Robber; forced strangers to wash his feet, then hurled them into sea where tortoise devoured them; slain by Theseus.

SCYLLA: Female monster inhabiting rock opposite Charybdis; menaced passing sailors.

SELENE: Goddess of moon.

SEMELE: Daughter of Cadmus; mother by Zeus of Dionysus; demanded Zeus ap- pear before her in all his splendor and was destroyed by his lightnings.

SIBYLS: Various prophetesses; most famous, Cumaean sibyl, accompanied Ae- neas into Hades.

SILENI: Minor woodland deities similar to satyrs (singular: silenus). Sometimes Silenus refers to eldest of satyrs, son of Hermes or of Pan.

SILVANUS: Roman god of woods and fields.

SINIS: Giant; bent pines, by which he hurled victims against side of mountain; slain by Theseus.

SIRENS: Minor deities who lured sailors to destruction with their singing.

SISYPHUS: King of Corinth; condemned in Tartarus to roll huge stone to top of hill; it always rolled back down again.

SOL: See Helios.

SOMNUS: See Hypnos.

SPHINX: Monster of Thebes; killed those who could not answer her riddle; slain by Oedipus. Name also refers to other monsters having body of lion, wings, and head and bust of woman.

STEROPE: See Pleiades.

STHENO: See Gorgons.

STYX: See Rivers.

SYMPLEGADES: Clashing rocks at entrance to Black Sea; Argo passed through, causing them to become forever fixed.

SYRINX: Nymph pursued by Pan; changed to reeds, from which he made his pipes.

TANTALUS: Cruel king; father of Pelops and Niobe; condemned in Tartarus to stand chin-deep in lake surrounded by fruit branches; as he tried to eat or drink, water or fruit always receded.

TARTARUS: Underworld below Hades; often refers to Hades.

TAYGETA: *See* Pleiades.

TELEMACHUS: Son of Odysseus; made unsuccessful journey to find his father.

TELLUS: Roman goddess of earth.

TERMINUS: Roman god of boundaries and landmarks.

TERPSICHOE: *See* Muses.

TERRA: Roman earth goddess.

THALIA: *See* Graces; Muses.

THANATOS (MORS): God of death.

THEMIS: Titan goddess of laws of physical phenomena; daughter of Uranus; mother of Prometheus.

THESEUS: Son of Aegeus; slew Minotaur; married and deserted Ariadne; later married Phaedra.

THISBE: Beloved of Pyramus; killed herself at his death.

THYESTES: Brother of Atreus; killed three of his sons and served them at banquet.

TIRESIAS: Blind soothsayer of Thebes.

TISIPHONE: *See* Furies.

TITANS: Early gods from which the twelve Olympian gods were derived; children of Uranus and Gaea.

TITHONUS: Mortal loved by Leda; changed into grasshopper.

TRITON: Demigod of sea; son of Poseidon.

TURNUS: King of Rutuli in Italy; slain by Aeneas.

ULYSSES: *See* Odysseus.

URANIA: *See* Muses.

URANUS: Personification of Heaven; husband of Gaea; father of the Titans; throned by his son Cronus.

VENUS: *See* Aphrodite.

VERTUMNUS: Roman god of fruit and vegetables; husband of Pomona.

VESTA: *See* Hestia.

VULCAN: *See* Hephaestus.

WINDS: Aeolus (keeper of winds); Eurus (Aquila) (north wind), Eurus (Eurus) (east wind), Notus (Auster) (south wind), Zephyrus (Favonius) (west wind).

ZEPHYRUS: *See* Winds.

ZEUS (JUPITER): Chief of the Olympian gods; son of Cronus and Rhea; husband of Hera.

Norse Mythology

AESIR: Chief gods of Asgard.

ANDVARI: Dwarf; robbed of gold and magic ring by Loki.

ANGERBOTH (Angrbotha): Giantess; mother by Loki of Fenrir, Hel, and Midgard serpent.

ASGARD (Asgarh): Abode of gods.

ASK (Aske, Ask): First man; created by Odin, Hoenir, and Lothur.

ASYNJUR: Goddesses of Asgard.

ATLI: Second husband of Gudrun; invited Gunnar and Hogni to his court, where they were slain; slain by Gudrun.

AUDHUMLA (Audhumbla): Cow that nourished Ymir; created Buri by licking ice cliff.

BALDER (Baldr, Baldur): God of light, spring, peace, joy; son of Odin; slain by Hoth at instigation of Loki.

BIFROST: Rainbow bridge connecting Midgard and Asgard.

BRAGI (Brage): God of poetry; husband of Ithunn.

BRANSTOCK: Great oak in hall of Volungs; into it, Odin thrust Gram, which only Sigmund could draw forth.

BRYNHILD: Valkyrie; wakened from magic sleep by Sigurd; married Gunnar;

instigated death of Sigurd; killed him and was burned on pyre beside Sigurd.

BUR (Bor): Son of Buri; father of Hoenir, and Lothur.

BURI (Bori): Progenitor of gods; son of Bur; created by Audhumla.

EMBLA: First woman; created by Hoenir, and Lothur.

FAFNIR: Son of Rodmar, whom he killed for gold in Otter's skin; in form of a dragon; guarded gold; slain by Sigurd.

FENRIR: Wolf; offspring of Loki and Angrboth; slays Odin at Ragnarok and is slain by Vitarr.

FORSETI: Son of Balder.

FREY (Freyr): God of fertility, crops; son of Njorth; originally Vanir.

FREYA (Freyja): Goddess of love, beauty; sister of Frey; originally Vanir.

FRIGG (Frigga): Goddess of wisdom; wife of Odin.

GARM: Watchdog of Hel; slays the dead; slain by Tyr at Ragnarok.

GIMLE: Home of the blessed after Ragnarok.

GIUKI: King of Nibelungs; slain by Gunnar, Hogni, Guttorm, and C.

THSHEIM (Gladshheim): Hall of Asgard.

M (meaning "Angry"): Sigmund's rewedled by Regin; used by Sigurd Fafnir.

YFELL: Sigmund's horse; descended Hlepnir.

MHILD: Mother of Gudrun; admin- magic potion to Sigurd which made rget Brynhild.

RUN: Daughter of Giuki; wife of ; later wife of Atil and Jonakr.

NAR: Son of Giuki; in his sem- Sigurd won Brynhild for him; slain of Atil.

TORM: Son of Giuki; slew Sigurd nhild's request.

MDALL (Heimdallr): Guardian of

Goddess of dead and queen of un- ld; daughter of Loki.

RDIS: Wife of Sigmund; mother of

NIR: One of creators of Ask and son of Bur.

NI: Son of Giuki; slain at hall of

H (Hoder, Hodur): Blind god of and darkness; slayer of Balder at tion of Loki.

NN (Ithun, Iduna): Keeper of apples of youth; wife of Bragi.

KR: Third husband of Gudrun.

MUNREK: Slayer of Swanhild; slain of Gudrun.

NNHEIM (Jotunheim): Abode of

and LIFTHRASIR: First man and after Ragnarok.

: God of evil and mischief; insti- Balder's death.

IUR (Lodur): One of creators of d Embla.

WARD (Midgarth): Abode of man- he earth.

WARD SERPENT: Sea monster; off- of Loki; slays, and is slain by, Thor arak.

R: Giant; guardian of well in Jo- m at root of Yggdrasill; knower of d future.

LNIR: Magic hammer of Thor.

FAR: Ship to be used by giants in Ag Asgard at Ragnarok; built from dead men.

A: Wife of Balder.

LUNGS: Dwellers in northern king- ed by Giuki.

HEIM (Nifelheim): Outer region of d darkness; abode of Hel.

TH: Father of Frey and Freya; y one of Vanir.

NORNS: Demigoddesses of fate: Urth (Urdur) (Past), Verthandi (Verdandi) (Present), Skuld (Future).

ODIN (Othin): Head of Aesir; creator of world with Vili and Ve; equivalent to Woden (Wotan) in Teutonic mythology.

OTTER: Son of Rodmar; slain by Loki; his skin filled with gold hoard of Andvari to appease Rodmar.

RAGNAROK: Final destruction of pres- ent world in battle between gods and giants; some minor gods will survive, and Lif and Lifthrasir will repeople world.

REGIN: Blacksmith; son of Rodmar; foster-father of Sigurd.

RERIR: King of Huns; son of Sigi.

RODMAR: Father of Regin, Otter, and Fafnir; demanded Otter's skin be filled with gold; slain by Fafnir, who stole gold.

SIF: Wife of Thor.

SIGGEIR: King of Goths; husband of Signy; he and his sons slew Volsung and his sons, except Sigmund; slain by Sig- mund and Sinfiotli.

SIGI: King of Huns; son of Odin.

SIGMUND: Son of Volsung; brother of Signy, who bore him Sinfiotli; husband of Hiordis, who bore him Sigurd.

SIGNY: Daughter of Volsung; sister of Sigmund; wife of Siggeir; mother by Sig- mund of Sinfiotli.

SIGURD: Son of Sigmund and Hiordis; wakened Brynhild from magic sleep; mar- ried Gudrun; slain by Gutorm at instiga- tion of Brynhild.

SIGYN: Wife of Loki.

SINFIOTLI: Son of Sigmund and Signy.

SKULD: See Norns.

SLEIPNIR (Sleipner): Eight-legged horse of Odin.

SURT (Surtr): Fire demon; slays Frey at Ragnarok.

SVARTALFAHEIM: Abode of dwarfs.

SWANHILD: Daughter of Sigurd and Gudrun; slain by Jormunrek.

THOR: God of thunder; oldest son of Odin; equivalent to Germanic deity Donar.

TYR: God of war; son of Odin; equiva- lent to Tiu in Teutonic mythology.

ULL (Ullr): Son of Sif; stepson of Thor.

URTH: See Norns.

VALHALLA (Valhall): Great hall in As- gard where Odin received souls of heroes killed in battle.

VALI: Odin's son; Ragnarok survivor.

VALKYRIES: Virgins, messengers of Odin, who selected heroes to die in battle and took them to Valhalla; generally con- sidered as nine in number.

VANIR: Early race of gods; three sur- vivors, Njorth, Frey, and Freya, are asso- ciated with Aesir.

VE: Brother of Odin; one of creators of world.

VERTHANDI: *See* Norns.

VILI: Brother of Odin; one of creators of world.

VINGOLF: Abode of goddesses in Asgard.

VITHARR (Vithar): Son of Odin; survivor of Ragnarok.

VOLSUNG: Descendant of Odin, and

father of Signy, Sigmund; his descendants were called Volsungs.

YGGDRASIL: Giant ash tree sprang from body of Ymir and supporting universe; its roots extended to Asgard, tunnheim, and Nifheim.

YMIR (Ymer): Primeval frost giant killed by Odin, Vili, and Ve; world created from his body; also, from his body Yggdrasil.

Egyptian Mythology

AARU: Abode of the blessed dead.

AMEN (Amon, Ammon): One of chief Theban deities; united with sun god under form of Amen-Ra.

AMENTI: Region of dead where souls were judged by Osiris.

ANUBIS: Guide of souls to Amenti; son of Osiris; jackal-headed.

APIS: Sacred bull, an embodiment of Ptah; identified with Osiris as Osiris-Apis or Serapis.

GEB (Keb, Seb): Earth god; father of Osiris; represented with goose on head.

HATHOR (Athor): Goddess of love and mirth; cow-headed.

HORUS: God of day; son of Osiris and Isis; hawk-headed.

ISIS: Goddess of motherhood and fertility; sister and wife of Osiris.

KHEPERA: God of morning sun.

KHNEMU (Khnum, Chnuphis, Chnemu, Chnum): Ram-headed god.

KHONSU (Khensu, Khuns): Son of Amen and Mut.

MENTU (Ment): Solar deity, sometimes considered god of war; falcon-headed.

MIN (Khem, Chem): Principle of material life.

MUT (Maut): Wife of Amen.

NEPHTHYS: Goddess of the dead; and wife of Set.

NU: Chaos from which world was created, personified as a god.

NUT: Goddess of heavens; consort of Geb.

OSIRIS: God of underworld and lord of dead; son of Geb and Nut.

PTAH (Phtha): Chief deity of Memphis.

RA: God of the Sun, the supreme son of Nut; Pharaohs claimed descent from him; represented as lion, cat, or falcon.

SERAPIS: God uniting attributes of Osiris and Apis.

SET (Seth): God of darkness and brother and enemy of Osiris.

SHU: Solar deity; son of Ra and Nut.

TEM (Atmu, Atum, Tum): Solar deity.

THOTH (Dhouti): God of wisdom and magic; scribe of gods; ibis-headed.

Rulers of England and Great Britain

Saxons¹

Name	Born	Ruled ²
Egbert ³	c. 775	828- 839
Ethelwulf	?	839- 858
Ethelbald	?	858- 860
Ethelbert	?	860- 866
Ethelred I	?	866- 871
Alfred the Great	849	871- 899
Edward the Elder	c. 870	899- 924
Athelstan	895	924- 939
Edmund I the Deed-doer ..	921	939- 946
Edred	c. 925	946- 955
Edwy the Fair	c. 943	955- 959
Edgar the Peaceful	943	959- 975
Edward the Martyr	c. 962	975- 979
Ethelred II the Unready ..	968	979-1016
Edmund II Ironside	c. 993	1016-1016

Danes

Canute	995	1016-1035
Harold I Harefoot	c.1016	1035-1040
Hardecnut	c.1018	1040-1042

Saxons

Edward the Confessor	c.1004	1042-1066
Harold II	c.1020	1066-1066

House of Normandy

Name	Born	Died
William I the Conqueror ..	1027	1066
William II Rufus	c.1056	1089
Henry I Beauclerc	1068	1100
Stephen of Blois	c.1100	1135

House of Plantagenet

Henry II	1133	1155
Richard I Coeur de Lion ..	1157	1189
John Lackland	1167	1199
Henry III	1207	1218
Edward I Longshanks	1239	1272
Edward II	1284	1327
Edward III	1312	1327
Richard II	1367	1377

House of Lancaster

Henry IV Bolingbroke	1367	1399
Henry V	1387	1413
Henry VI	1421	1447

House of York

Edward IV	1442	1483
Edward V	1470	1483
Richard III	1452	1485

House of Tudor			
	Born	Ruled ²	
VII	1457	1485-1509	
VIII	1491	1509-1547	
VI	1537	1547-1553	
Lady Jane Grey) ⁵ ..	1537	1553-1553	
("Bloody Mary") ..	1516	1553-1558	
th I	1533	1558-1603	
House of Stuart			
.....	1566	1603-1625	
I	1600	1625-1649	
Commonwealth			
of State .....	.....	1649-1653	
Cromwell ⁷	1599	1653-1658	
Cromwell ⁷	1626	1658-1659 ⁸	

Restoration of House of Stuart			
II	1630	1660-1685	
I	1633	1685-1688 ⁹	

for Saxon Kings are still subjects of contro-
Year of end of rule is also that of death, unless
indicated. ⁵ Became King of West Saxons in
sundered (from 828) first King of all England.
10. ⁸ Nominal Queen for 9 days; not counted
by some authorities. She was beheaded in 1554.

Restoration of House of Stuart (cont'd)			
Name	Born	Ruled ²	
William III ¹⁰	1650	1689-1702	
Mary II ¹⁰	1662	1689-1694	
Anne	1665	1702-1714	

House of Hanover			
George I	1660	1714-1727	
George II	1683	1727-1760	
George III	1738	1760-1820	
George IV	1762	1820-1830	
William IV	1765	1830-1837	
Victoria	1819	1837-1901	

House of Saxe-Coburg ¹¹			
Edward VII	1841	1901-1910	

House of Windsor ¹¹			
George V	1865	1910-1936	
Edward VIII	1894	1936-1936 ¹²	
George VI	1895	1936-1952	
Elizabeth II	1926	1952-	

⁹ Ruled in Scotland as James VI (1567-1625). ⁷ Lord
Protector. ⁸ Died 1712. ⁹ Died 1701. ¹⁰ Joint rulers
1689-1694. ¹¹ Name changed from Saxe-Coburg to
Windsor in 1917. ¹² Has been known since his abdicat-
ion as the Duke of Windsor. ¹³ Henry VI reigned again
briefly 1470-71.

British Prime Ministers Since 1770

	Term	Name	Term
orth (Tory)	1770-1782	Marquis of Salisbury	
of Rockingham (Whig) ..	1782-1782	(Conservative)	1885-1886
Shelburne (Whig)	1782-1783	William E. Gladstone (Liberal) ..	1886-1886
Portland (Coalition)	1783-1783	Marquis of Salisbury	
Pitt, the Younger (Tory) ..	1783-1801	(Conservative)	1886-1892
Addington (Tory)	1801-1804	William E. Gladstone (Liberal) ..	1892-1894
Pitt, the Younger (Tory) ..	1804-1806	Earl of Rosebery (Liberal)	1894-1895
Grenville (Whig)	1806-1807	Marquis of Salisbury	
Portland (Tory)	1807-1809	(Conservative)	1895-1902
Perceval (Tory)	1809-1812	Earl Balfour (Conservative)	1902-1905
Liverpool (Tory)	1812-1827	Sir H. Campbell-Bannerman	
Canning (Tory)	1827-1827	(Liberal)	1905-1908
t Goderich (Tory)	1827-1828	Herbert H. Asquith (Liberal)	1908-1915
Wellington (Tory)	1828-1830	Herbert H. Asquith (Coalition) ..	1915-1916
ey (Whig)	1830-1834	David Lloyd George (Coalition) ..	1916-1922
t Melbourne (Whig)	1834-1834	Andrew Bonar Law (Conservative) ..	1922-1923
ert Peel (Tory)	1834-1835	Stanley Baldwin (Conservative) ..	1923-1924
t Melbourne (Whig)	1835-1841	James Ramsay MacDonald	
ert Peel (Tory)	1841-1846	(Labour)	1924-1924
ssell (Whig)	1846-1852	Stanley Baldwin (Conservative) ..	1924-1929
Derby (Tory)	1852-1852	James Ramsay MacDonald	
Aberdeen (Coalition)	1852-1855	(Labour)	1929-1931
t Palmerston (Liberal)	1855-1858	James Ramsay MacDonald	
Derby (Conservative)	1858-1859	(Coalition)	1931-1935
t Palmerston (Liberal)	1859-1865	Stanley Baldwin (Coalition)	1935-1937
ssell (Liberal)	1865-1866	Neville Chamberlain (Coalition) ..	1937-1940
Derby (Conservative)	1866-1868	Winston Churchill (Coalition)	1940-1945
n Disraeli (Conservative) ..	1868-1868	Clement R. Attlee (Labour)	1945-1951
E. Gladstone (Liberal) ..	1868-1874	Sir Winston Churchill	
n Disraeli (Conservative) ..	1874-1880	(Conservative)	1951-1955
E. Gladstone (Liberal) ..	1880-1885	Sir Anthony Eden (Conservative) ..	1955-1957
		Harold Macmillan (Conservative) ..	1957-

Birthstones

Source: Jewelry Industry Council.

.....	Garnet	July	Ruby
.....	Amethyst	August	Peridot or Sardonyx
.....	Aquamarine or Bloodstone	September	Sapphire
.....	Diamond	October	Opal or Tourmaline
.....	Emerald	November	Topaz
.....	Pearl, Alexandrite or Moonstone	December	Turquoise or Zircon

Rulers of France

Carolingian Dynasty

Name	Born	Ruled ¹
Pepin the Short	c. 714	751-768
Charlemagne ²	742	768-814
Louis I the Debonair ³	778	814-840
Charles I the Bald ⁴	823	840-877
Louis II the Stammerer	846	877-879
Louis III ⁵	c. 863	879-882
Carloman ⁵	?	879-884
Charles II the Fat ⁶	839	884-887 ⁷
Eudes (Odo), Count of Paris	?	888-898
Charles III the Simple ⁸	879	893-923 ⁹
Robert I ¹⁰	c. 865	922-923
Rudolf (Raoul), Duke of Burgundy	?	926-936
Louis IV d'Outremer	c. 921	936-954
Lothair	941	954-986
Louis V the Sluggard	c. 967	986-987

Capetian Dynasty

Hugh Capet	c. 940	987-996
Robert II the Pious ¹¹	c. 970	996-1031
Henry I	1008	1031-1060
Philip I	1052	1060-1108
Louis VI the Fat	1081	1108-1137
Louis VII the Young	c. 1121	1137-1180
Philip II (Philip Augustus)	1165	1180-1223
Louis VIII the Lion	1187	1223-1226
Louis IX (St. Louis)	1214	1226-1270
Philip III the Bold	1245	1270-1285
Philip IV the Fair	1268	1285-1314
Louis X the Quarreler	1289	1314-1316
John I	1316	1316-1316
Philip V the Tall	1294	1316-1322
Charles IV the Fair	1294	1322-1328

House of Valois

Philip VI	1293	1328-1350
John II the Good	1319	1350-1364
Charles V the Wise	1337	1364-1380
Charles VI the Well-Beloved	1368	1380-1422
Charles VII	1403	1422-1461
Louis XI	1423	1461-1483
Charles VIII	1470	1483-1498
Louis XII the Father of the People	1462	1498-1515
Francis I	1494	1515-1547
Henry II	1519	1547-1559
Francis II	1544	1559-1560
Charles IX	1550	1560-1574
Henry III	1551	1574-1589

House of Bourbon

Henry IV of Navarre	1553	1589-1610
Louis XIII	1601	1610-1643
Louis XIV the Great	1638	1643-1715
Louis XV the Well-Beloved	1710	1715-1774

House of Bourbon (cont'd)

Name	Born	Died
Louis XVI	1754	1793
Louis XVII (Louis Charles de France) ¹²	1785	1793

First Republic

National Convention	1793	1795
Directory (Directoire)	1795	1799

Consulate

Napoleon Bonaparte ¹⁴	1769	1799
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First Empire

Napoleon I	1769	1804
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Restoration of House of Bourbon

Louis XVIII le Désiré	1755	1814
Charles X	1757	1824

Bourbon-Orleans line

Louis Philippe ("Citizen King")	1773	1836
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Second Republic

Louis Napoleon ¹⁸	1808	1840
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Second Empire

Napoleon III (Louis Napoleon)	1808	1852
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Third Republic

Louis Adolphe Thiers ²⁰	1797	1871
Marie E. P. M. de MacMahon ²⁰	1808	1873
François P. J. Grévy ²⁰	1807	1874
Sadi Carnot ²⁰	1837	1883
Jean Casimir-Périer ²⁰	1847	1893
François Félix Faure ²⁰	1841	1893
Émile Loubet ²⁰	1838	1893
Clement Armand Fallières ²⁰	1841	1903
Raymond Poincaré ²⁰	1860	1913
Paul E. L. Deschanel ²⁰	1856	1923
Alexandre Millerand ²⁰	1859	1920
Gaston Doumergue ²⁰	1863	1920
Paul Doumer ²⁰	1857	1931
Albert Lebrun ²⁰	1871	1929

Vichy Government

Henri Philippe Pétain ²²	1856	1949
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Provisional Government

Charles de Gaulle ²⁴	1890	1943
Félix Gouin ²⁴	1884	1943
Georges Bidault ²⁴	1899	1949

Fourth Republic

Vincent Auriol ²⁰	1884	1943
René Coty ²⁰	1882	1953

Fifth Republic

Charles de Gaulle ²⁰	1890	1953
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¹ Year of end of rule is also that of death, unless otherwise indicated. ² Crowned Emperor of the West in 800. ³ Holy Roman Emperor 814-840. ⁴ Holy Roman Emperor 875-877 as Charles II. ⁵ Ruled jointly 879-882. ⁶ Holy Roman Emperor 881-887 as Charles III. ⁷ Died 888. ⁸ King 893-898 in opposition to Eudes. ⁹ Died 929. ¹⁰ Not counted in regular line of Kings of France by some authorities. Elected by nobles but killed in Battle of Soissons. ¹¹ Sometimes called Robert I. ¹² Executed 1793. ¹³ Titular King only. He died in prison according to official reports, but many pretenders appeared during the Bourbon restoration. ¹⁴ As First Consul, Napoleon

held the power of government. In 1804, he became Emperor. ¹⁵ Abdicated first time June 1814. ¹⁶ Paris Mar. 1815, after escape from Elba; Louis fled to Ghent. Abdicated second time June 1815. ¹⁷ Named as his successor his son, Napoleon II, but not acceptable to the Allies. He died 1821. ¹⁸ Died 1850. ¹⁹ President; became Emperor 1852. ²⁰ Died 1873. ²¹ President. ²² Died 1877. ²³ Died 1891. ²⁴ Died 1907. ²⁵ Died 1929. ²⁶ Died 1934. ²⁷ Died 1922. ²⁸ Died 1942. ²⁹ Died 1950. ³⁰ Chief of State. ³¹ Died 1960. ³² Still alive.

Rulers of Germany and Prussia

Kings of Prussia

	Born	Ruled ¹
ck I ²	1657	1701-1713
ck William I	1688	1713-1740
ck II the Great	1712	1740-1786
ck William II	1744	1786-1797
ck William III	1770	1797-1840
ck William IV	1795	1840-1861
n I	1797	1861-1871 ³

Emperors of Germany

	Born	Ruled ¹
n I	1797	1871-1888
ck III	1831	1888-1888
n II	1859	1888-1918 ⁴

of end of rule is also that of death, unless other-
icated. ² Was Elector of Brandenburg (1688-
Frederick III. ³ Became Emperor of Germany

Heads of the Reich

Name	Born	Ruled ¹
Friedrich Ebert ⁵	1871	1919-1925
Paul von Hindenburg ⁵	1847	1925-1934
Adolf Hitler ^{5,7}	1889	1934-1945
Karl Doenitz ⁵	1891	1945-1945 ⁸

German Federal Republic (Western)

Theodor Heuss ⁵	1884	1949-1959 ⁹
Heinrich Lübke ⁵	1895	1959-

German Democratic Republic (Eastern)

Wilhelm Pieck ⁵	1876	1949-
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in 1871. ⁴ Died 1941. ⁵ President. ⁶ Führer. ⁷ Named
Chancellor by President Hindenburg in 1933. ⁸ Still
alive.

Rulers of Russia Since 1533

	Born	Ruled ¹
y the Terrible	1530	1533-1584
re I	1557	1584-1598
odunov	c.1551	1598-1605
re II	1589	1605-1605
ius I ²	?	1605-1606
V Shuiski	?	1606-1610 ³
of Troubles"		1610-1613
Romanov	1596	1613-1645
.....	1629	1645-1676
re III	1656	1676-1682
.....	1666	1682-1689 ⁵
the Great ⁴	1672	1682-1725
re I	c.1684	1725-1727
.....	1715	1727-1730
.....	1693	1730-1740
.....	1740	1740-1741 ⁶
.....	1709	1741-1762
I	1728	1762-1762

of end of rule is also that of death, unless other-
icated. ² Also known as Pseudo-Demetrius.
12. ⁴ Ruled jointly until 1689, when Ivan was

Name	Born	Ruled ¹
Catherine II the Great	1729	1762-1796
Paul I	1754	1796-1801
Alexander I	1777	1801-1825
Nicholas I	1796	1825-1855
Alexander II	1818	1855-1881
Alexander III	1845	1881-1894
Nicholas II	1868	1894-1917 ⁷

Provisional Government

Prince Georgi Lvov ⁸	1861	1917-1917 ⁹
Alexander Kerensky ⁸	1881	1917-1917 ¹⁰

U.S.S.R.

Nikolai Lenin ⁸	1870	1917-1924
Joseph Stalin ¹¹	1879	1924-1953
Georgi M. Malenkov ⁸	1902	1953-1955 ¹⁰
Nikolai A. Bulganin ⁸	1895	1955-1958 ¹⁰
Nikita S. Khrushchev ⁸	1894	1958-

deposed. ⁵ Died 1696. ⁶ Died 1764. ⁷ Killed 1918.
⁸ Premier. ⁹ Died 1925. ¹⁰ Still alive. ¹¹ General Secre-
tary of Communist party; Premier 1941-53.

Animal Names: Male, Female and Young

Source: Grace Davall, N.Y. Zoological Society.

Male	Female	Young	Animal	Male	Female	Young
Jack	Jenny	Foal	Goose	Gander	Goose	Gosling
He-bear	She-bear	Cub	Horse	Stallion	Mare	Foal
Tom	Tabby	Kitten	Lion	Lion	Lioness	Cub
Bull	Cow	Calf	Rabbit	Buck	Doe	.....
Rooster	Hen	Chick	Sheep	Ram	Ewe	Lamb
Buck	Doe	Fawn	Swan	Cob	Pen	Cygnets
Dog	Bitch	Pup	Swine	Boar	Sow	Shoat
Drake	Duck	Duckling	Tiger	Tiger	Tigress	Cub
Bull	Cow	Calf	Whale	Bull	Cow	Calf
Dog	Vixen	Cub	Wolf	Dog	Bitch	Cub

Mason and Dixon's Line

a and Dixon's Line (often called
son-Dixon Line) is the boundary
Pennsylvania and Maryland, run-
a north latitude of 39°43'19.11".
ater part of it was surveyed from
by Charles Mason and Jeremiah

Dixon, English astronomers who had been
appointed to settle a dispute between the
colonies. As the line was partly the bound-
ary between the free and the slave states,
it has come to signify the division between
the North and the South.

WORD SECTION

New and Newly Important Words and Meanings
Words Frequently Misspelled . . . Forms of Address

Prepared by

G. & C. MERRIAM CO., Springfield, Mass.

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Webster's New Collegiate Dictionary

New and Newly Important Words and Meanings

Note: This is a selected list of words, from a wide variety of subject areas, that have come of fairly recent general interest. Many, as *radar*, *colorcast*, and *dynel*, are new in the sense that they were recently introduced into the language. Some, as *omnibus*, *librettist*, *alligator*, are recently acquired new or extended senses of well-established terms. Other *rocket ship*, *snollygoster* and *fission*, are terms that have been in limited use within certain circles for a considerable time but have only recently become generally used and known. This list would be out of keeping with the spirit of a list like this and beyond the space available to treat the entries in formal dictionary fashion. In general, only the commonest spellings of the most basic and important of the new senses have been given.

ABSTRACT: Characterized by designs in which an artist, using lines or blocks of color rather than pictures of actual objects, attempts to set forth his feelings or ideas.

ACETATE RAYON: A rayon fiber made with cellulose acetate.

ACK-ACK: An anti-aircraft gun; also, the fire of such a gun.

ACRONYM: A word formed from the initial letters or the first and last syllables of the words in a compound (*jato* from *jet assisted take-off*; *motel* from *motorists' hotel*).

ACTH: A compound obtained from the pituitary gland, used especially in the treatment of arthritis.

ACTINOMYCIN: An antibiotic isolated from certain soil bacteria.

ADDITIVE: Any substance which, when added to another product, such as gasoline or a storage battery, is supposed to make it more powerful or longer-lasting.

AEROEMBOLISM: An abnormal bodily condition, called also *air bends*, due to the formation of nitrogen bubbles in the blood and spinal fluid brought about by rapid ascent into high altitudes.

AGITPROP: Serving as a means for spreading propaganda intended to promote militancy among the common people;—applied originally to pro-Communist activities.

AIRLIFT: A supply line operated by aircraft.

AIRSTRIPE: A hard-surfaced runway for the take-off and landing of aircraft; also, a portable runway made of steel sheets.

ALCOMETER: A device for detecting drunkenness by measuring the amount of alcohol in a sample of exhaled air.

ALERT: A signal to warn of danger, as from hostile aircraft; also, the period of time in which the signal is in effect.

ALLIGATOR: A flat-bottomed, armored military vehicle for use on land or water.

ALL-OUT: Making use of all available resources (as, an *all-out effort*).

AMPLITUDE MODULATION or AM: A method of radio broadcasting in which the amplitude of the carrier wave is modulated in accordance with the form of the sound signal wave.

AMTRAC: An amphibious tractor, used especially as a military vehicle.

ANGLE: A special approach or technique for achieving an end, as for writing a story or promoting an interest.

ANTIBIOTIC: A substance produced by a living organism, especially by a bacterium or fungus, that is used to kill or stop the growth of disease germs.

ANTIHISTAMINE: An agent used in the prevention or treatment of allergic reactions.

AQUACADE: An elaborate water show consisting of exhibitions of swimming, diving, and acrobatics, accompanied by music.

ARENA THEATER = THEATRE-IN-THE-ROUND

ARTIFICIAL INSEMINATION: Introduction of semen into the genital tract of a female animal by other than the natural means.

ASTRODOME: A transparent dome on the upper surface of an airplane from which a navigator makes celestial observations.

ATEBRIN: An antimalarial drug, quinacrine dihydrochloride.

ATOMIC BOMB, ATOM BOMB, or A-BOMB: A bomb with violent explosive power due to a sudden release of atomic energy.

ATOMIC COCKTAIL: A radioactive substance, such as sodium iodide, dissolved in alcohol and given as a drink to cancer patients.

AUDIO: Pertaining to or used in the transmission or reception of sound in TV.

PHILE: One who is enthusiastic about and, especially music from high-fidelity discs or recordings.

VISUAL: Involving both hearing and sight (as, *audiovisual* education uses films, slides, phonograph records, and the like, to supplement instruction).

STRYPTOMYCIN: An antibiotic isolated from a microorganism.

AUSTERITY: A severe or enforced economy characterized by a lack of luxuries (as, *war austerity* in Great Britain).

MANUAL TRANSMISSION: Automotive transmission in which the gears are shifted manually.

MECHANIZATION: The substitution of machines and mechanical devices for human beings in manufacturing process.

CHIN LASH: A triangular kerchief worn over head and tied under the chin.

NANNY: One who is hired, usually for a few hours, to care for children while parents are absent from the home.

ROTTEN POINT PEN: A fountain pen in which writing point is a tiny ball that rotates by rubbing against an inking magazine.

IRON CURTAIN: The military, political, propaganda barrier isolating territory controlled by the Chinese Communists.

BANK: A place for storing a reserve supply; occurs in such combinations as *blood bank*, *eye bank*, *bone bank*, *skin bank*.

ROLL: One having a sizable bankroll ready and ample supply of funds.

PHARMACEUTICAL: One of a large group of drugs used as sedatives or antispasmodics.

BOOST: To move at a high speed in a right course;—used especially of vehicles.

ENGLISH: A copyrighted system intended to simplify the learning of English by the use of a vocabulary limited to the most essential words.

THERMOGRAPH: An instrument for measuring the temperature variations of sea surface water according to depth.

ROCKET LAUNCHER: A portable rocket-launcher, used usually as an antitank weapon.

HEAD: An area on an enemy shore where an advance force occupies and defends.

BEACON: A directional radio signal for guiding aircraft, audible as a continuous tone when the aircraft stays on course, but broken tone if it veers to the left or right.

BOOGIE: A style of jazz with many notes to measure, usually played loud and fast and characterized by changing of key and timing of odd beats.

LAND: To land an airplane on the rear side of its fuselage without using landing gear.

SCOPE: A steel sphere used for deep-diving and observation.

ACCELERATOR: An apparatus in which electrons are accelerated to high speed and formed into beta rays for use in generating high-energy X-rays or for nuclear bombardment.

FEEL, slang: An important, impressive person; sometimes one who only feels himself important.

BIKINI: A woman's two-piece bathing suit of abbreviated style.

BINAURAL SOUND: Sound recorded or transmitted by pairs of equipment in order to give the listener the effect of having heard the original with his own two ears.

BIOLOGICAL WARFARE: Warfare in which living organisms, especially disease germs, are used against human, animal, and plant life; also, warfare involving the use of synthetic chemicals against plants.

BIRD, slang: An enthusiast (as, a *bird* about music); also, any person thought to be odd or strange.

BITCH, slang: To gripe; to complain.

BLACK MARKET: Trade in violation of official controls or restrictions, especially those concerning price ceilings, rationing, and priorities; also, a market or group carrying on such trade.

BLISTER: A compartment, often covered by a transparent dome, that protrudes from the fuselage of an aircraft and is usually occupied by a gunner or observer.

BLITZ: A violent, swift military attack; also, any sudden, overpowering attack;—short for *blitzkrieg*.

BLOCKBUSTER: A huge, high-explosive demolition bomb, usually one weighing two, four, or six tons.

BLOODMOBILE: An automobile equipped for collecting blood from volunteer donors.

BLUEPRINT: A detailed plan for a project or program of action (as, a *blueprint* for mobilization).

BLUE RIBBON JURY: A panel of jurors selected for qualifications such as education or property ownership, that may be called to sit in complicated cases.

BOBBY SOCK: A girl's sock reaching above the ankle.

BOBBY SOXER: A young girl, especially one in the early teens;—from the wearing of bobby socks.

BOMB: A small container in which a liquid, as an insecticide, is held under pressure and released as a spray.

BOOBY TRAP: An explosive device concealed and attached to some harmless-looking object; also, any trap for the unsuspecting.

BOOGIE-WOOGIE: A style of playing blues on the piano, characterized by a persistent bass rhythm and elaborate treatments of a simple melody, often in contrary motion to the bass.

BOOKBURNING: Systematic destruction, usually by a government, of books believed to contain dangerous ideas; hence, the suppression of ideas.

BOOKMOBILE: A closed autotruck with shelves of books, which serves as a traveling library or bookstore.

BOOSTER: A device for strengthening radio or television signals in areas where the reception is weak.

BOP: Short for *bebop*; also, one fond of bebop.

BOTTLENECK: To delay progress; to hold up a process, especially at a critical point.

BOYS' TOWN: A farm or school for homeless or delinquent boys, organized like a town and governed by the boys themselves.

- BRAINWASHING:** The forcible replacement of one set of political ideas by another set, especially through indoctrination or mental torture.
- BRASS:** Military and naval officers of high rank or position, especially those in top commands.
- BREAK:** A short rest period, often one set aside from the working day.
- BRIEF:** To give final, last-minute instructions or information (as, to *brief* the crew of a bomber before a mission).
- BROWNOUT:** A dimming of street lights and various other outdoor lighting, chiefly to conserve fuel supplies.
- BRUSHOFF:** A curt or offhand dismissal (as, to give someone the *brushoff*).
- BUDGIE:** Short for *budgerigar*, the zebra parakeet.
- BUILD-UP:** Extremely favorable notice, as by the press or radio, designed to popularize a product, personality, or organization.
- BUILT-IN:** Functioning as a part of, but separately identifiable from, a given unit (as, *built-in* shelves); also, conditioned (as, a *built-in* reaction).
- BULLDOZER:** A tractor-driven machine with a broad, blunt horizontal blade or ram, used especially in road building and clearing land.
- BUMP:** To push (a person) out of his place in order to take it for oneself (as, to *bump* a man from his job).
- BURGER:** A sandwich usually made of a flat roll cut in half and filled either with hamburger or another food specified (as, *pork-burger* or *beefburger*).
- BURP GUN:** A machine pistol.
- BUTADIENE:** A colorless gas, made from petroleum and alcohol, used in the making of synthetic rubber.
- BUY, *slang*:** To accept; to agree to; to assent (as, to *buy* an idea or an argument).
- BUZZ:** To fly an airplane fast and at a low altitude over (as, to *buzz* an airfield).
- CABANA:** A beach shelter resembling a cabin, usually with an open side facing the sea.
- CADRE:** A nucleus of thoroughly indoctrinated leaders who actively promote the interests of a communist or revolutionary party.
- CAFÉ CURTAINS:** Plain, straight-hanging curtains, usually hung on poles by loops or rings, used to cover the lower part of a window or door.
- CAFÉ SOCIETY:** People who frequent fashionable cafés and night clubs.
- CALYPSO:** A ballad in African rhythm, often a parody or a satire on current events, sung especially by natives of the British West Indies as part of a pre-Lenten carnival.
- CANDID CAMERA:** A camera, usually a small one with a fast lens, used for taking unposed, informal pictures, usually without the subject's knowledge.
- CANNIBALIZE:** To dismantle a machine in order to get parts for use as replacements in other machines.
- CAPSULE:** Of a small type or in a condensed or streamlined form (as, a *capsule* review, criticism, or submarine).
- CAPTIVE AUDIENCE:** An audience obliged to stay within hearing of a speech or broadcast, often being subjected to advertising or propaganda.
- CARD-CARRYING MEMBER:** A Communist whom a party membership card has been issued and who presumably carries it on his person.
- CARHOP:** A waiter or waitress at a drive-in restaurant who serves food and drinks to customers in their parked cars.
- CARPORT:** A roofed shelter for an automobile, usually attached to another building and with two or more open sides.
- CARTRIDGE:** A removable pickup in the arm of a phonograph.
- CASUAL:** Of clothing, designed in a simple, easy style suitable for informal or sports events.
- CEILING:** A maximum, as for a price, wage, fee, or rent, which is fixed as the upper legal limit by government authority, usually on the basis of the level prevailing on a certain date.
- CERAMAL = CERMET.**
- CERMET:** A strong, heat-resistant metallurgical alloy.
- CHAIN REACTION:** In chemistry and physics, a process which can continue itself because one of its resulting products is always able to start the process anew with the original material is used up.
- CHALKBOARD:** A smooth flat surface, made of slate or composition, for writing on with chalk.
- CHALKTALK:** A talk or lecture which the speaker illustrates by making drawings or cartoons as he talks.
- CHANNEL:** A narrow band of frequencies in which a radio or television program message is transmitted.
- CHARACTER ASSASSINATION:** The attempt to discredit or destroy the reputation of another person, often by making various unproved accusations.
- CHEAP:** Having a depreciated purchase price, power or value, especially as the result of a currency inflation (as, *cheap* dollars).
- CHEESECAKE:** Photography or photograph intended to display or accent features, charms or attractions; also, any photograph having a considerable amount of sex appeal.
- CHICHI, *slang*:** Stylish; chic; fashionable; also, affected or esoteric.
- CHLORAMPHENICOL:** An antibiotic effective against certain rickettsiae and viruses.
- CHLORDANE or CHLORDAN:** An odorless, white insecticide.
- CHORAL SPEAKING:** Interpretive reading or recitation, usually of poetry or rhythmic prose, by a group of voices known as a *speech choir*.
- CHOREOGRAPH:** To compose and arrange a ballet or dance; also, to provide a score or a piece of music with a ballet or dance.
- CHGROSCRIPT:** A system of notation used in teaching and recording dance figures and steps.
- CINCHER:** A wide, snug-fitting ornamental belt for women.
- CLASSIFIED:** Forbidden to be revealed.

authorized circles, for reasons of national security.

AND-DAGGER: Of literature, dealing with intrigue and melodramatic action, usually of characters in a colorful historical setting, and involving espionage, duels, and the like.

R, slang: To beat or pound mercilessly, also, to defeat overwhelmingly.

CIRCUIT: Television transmission in which the signal is not broadcast but can be received only by interconnected receivers.

CHAMBER: A closed vessel containing liquid water whose sudden expansion is made visible by a trail of white droplets in the passage of an ionized particle.

SEEDING: The introduction of a substance, as dry ice or silver iodide, into certain types of clouds in order to cause rainfall.

LEAF: A road plan resembling a cloverleaf, in which one road passes over another, permitting traffic to merge without left-hand or abrupt turns or dis-crossings.

CLUTCH: A critical point; a pinch (as, to get through in the clutch).

BAG: A woman's purse or bag, usually small and without a handle, which is carried in the hand.

CABLE: A cable used in the transmission of telegraph, telephone, and television signals, consisting of a tube of insulating material surrounding but insulated from a central conductor.

BREAK: A rest period during the working day, allowing the employee time for a cup of coffee.

FRONT: In meteorology, the forward edge of a mass of cold air.

WAR: A struggle between two nations or groups of nations, waged by use of military and economic strategy, propaganda and other measures short of armed conflict.

HAIR: In hairdressing, a permanent wave produced by a chemical solution.

DEFENSIVE SECURITY: Security of all the members of an association of nations against aggression by any other nation or nations.

COLORED: A television broadcast in color. **COMBINATION:** A small group of musicians, usually jazz players;—from *combination*.

BOOK: A paper-bound book made up of a series of cartoons or comic strips, usually humorous, often telling a story of adventure or crime.

COMMANDO: A band or unit of troops specialized for making surprise raids on enemy territory; also, a member of such a unit.

SPOT: That portion of a sponsored radio or television program devoted to advertising; also, the script prepared for such a advertising announcement.

TRAVELER: A member or agent of the Cominform party; also, a fellow traveler.

BLACK AND WHITE: Designating a system in which television broadcasts may also be received in black and white on receivers not yet equipped for color reception.

COMPOUND F: A hormone used in the treatment of arthritis.

CONDITIONER: A substance which, when added to soil, improves aeration, workability, and crop yield.

CONSCRIPT: To enroll by compulsion for military service.

CONTACT LENS: A lens of glass or plastic fitted to the eyeball, worn instead of the usual eyeglass to correct defects of vision.

CONTAINMENT: Restraint; specifically, the restriction of Communism to fixed territorial limits.

CONTOUR FARMING: A system of farming in which plowing and planting follow the contour lines of sloping land, thus retarding erosion from the runoff of rainwater.

CONVERSATION PIECE: Any unusual or distinctive article, as of clothing or furniture, which is likely to attract attention and provide a subject for conversation.

CONVERTER: A device for adapting a television receiver to receive channels other than those for which it was designed.

CONVERTIPLANE: An aircraft that takes off and lands like a helicopter but flies like a conventional airplane.

COOKOUT: An outing at which a meal is cooked and eaten in the open.

CORN: Corny acting or playing.

CORNY: Trite, stale; old-fashioned, or countrified; also, of music, played or sung in a bland, unsophisticated style.

CORONARY THROMBOSIS: A blood clot (a thrombus) occurring in an artery of the heart.

CORTISONE: A compound used in treating rheumatoid arthritis and certain allergies.

COUNTER-INTELLIGENCE: Organized activities of military intelligence services designed to block enemy sources of information and deceive the enemy by ruses, misinformation, and the like.

COUNTERWORD: A word used in popular speech in such a variety of situations that its original, specific meaning is lost and it serves only as a counter or token used in place of a more definite word (examples: *swell, awful, nice*).

COURTESY CARD: An identification card which supposedly assures its holder of favors or special treatment, as from the police.

CRACK UP: To crash or cause to crash, as an airplane; hence, to break down; collapse; go to pieces.

CRASHLANDING: An airplane landing in which the plane is either damaged or destroyed.

CREDIT LINE: A line, note, or name published with an article, news story, photograph, or the like, acknowledging the source.

CREEPING: Making, or thought to be making, inroads or undesired progress (as, *creeping socialism*).

CREW CUT: A short-cropped, bristly haircut for men.

CURVACEOUS: Having a feminine figure which is well-proportioned and marked by pronounced curves.

CUTBACK: A reduction in a prevailing rate, amount, or number (as, a production *cut-back*).

CYBERNETICS: Comparative study of the control system in the human brain and nervous system with that in such mechanical-electrical communication systems as computing machines.

CYCLOTRON: An apparatus used for imparting high speeds to electrified particles, used especially to bombard the nuclei of atoms in order to produce transmutations and artificial radioactivity.

DAISY: A circular cheese, usually about 12 to 14 inches in diameter and weighing between 18 and 24 pounds.

DDT: A colorless, odorless insecticide, used especially against body lice, flies, mosquitoes, and agricultural pests.

DEAD DUCK: Anything doomed or past recovery.

DEADPAN: A completely expressionless, immobile face.

DECAMISADO: A member of the Argentine working class.

DECONTROL: To remove control from (as, to decontrol the price of eggs).

DE-EMPHASIZE: To diminish in importance; to make less prominent (as, a move to de-emphasize football at a college).

DEEP-FREEZER: A cabinet where food may be quick-frozen and stored.

DEFICIT SPENDING: Spending in excess of income;—usually applied to a government.

DEGREE DAY: A unit that represents one degree of declination from any given point in the mean outdoor temperature for a day, often used in measuring fuel requirements for a building.

DE-ICER: Any system or mechanism used to rid or keep free of ice the wings and tail of an aircraft.

DELTA WING PLANE: A fast, high-flying airplane, triangular in shape, like the Greek letter delta.

DELTIOLOGY: The hobby of collecting post cards.

DENAZIFY: To rid (the people or institutions of a Nazified country) of Nazism and its influence.

DESENSITIZE: In psychiatry, to free from a neurotic state; to make immune to a morbid emotional domination.

DETECTAPHONE: A telephone apparatus equipped with a microphone transmitter, used especially for listening secretly.

DETERGENT: A soluble or liquid preparation, often called "soapless soap," that resembles soap in its ability to emulsify oils and hold dirt in suspension.

DIAL TONE: A steady hum, audible in a telephone receiver, indicating that the line is free and a number may be dialed.

DILLY: Something of superior or remarkable quality; often, something presenting unusual difficulties or complications.

DIM OUT: To obscure in dimness, as by restricting illumination to specks or slits of light, lights shaded from above, or blue lights.

DIRECTIVE: An order or instruction as to plan or procedure, such as might be issued by a military official, or by a government or business executive.

DISC JOCKEY or DISK JOCKEY: One who

conducts and announces a program of musical records, usually with advisory or nonmusical comments interspersed.

DISCOGRAPHY: A descriptive, classified catalogue or listing of phonograph records, usually including dates and performers.

DISCOPHILE: An enthusiastic collector of student of phonograph records.

DISPLACED PERSON or DP: A person expelled or deported from his home country during World War II as a prisoner of war, forced labor, or because of his race, politics, or religion.

DOCUMENTARY: A film that depicts in realistic form a factual and authentic presentation, as of an event or a social or cultural phenomenon.

DOODLE: An aimless, somewhat automatic design, sketch, or scribbling made when one's mind is occupied with something else.

DOSIMETER: A device for measuring the amount of radioactivity absorbed by the body.

DOUBLE-DOME: A highbrow; an intellectual.

DOUBLE-TAKE: A delayed reaction to something of importance or meaning of something that at first escaped notice;—usually in a phrase, to do a double-take.

DOUBLE TALK: Talk or writing that is intended to be earnest and meaningful but is actually a mixture of sense, gibberish, and unintelligible verbiage.

DOUBLE-THINK: The ability to have in mind at the same time two contradictory views and accept both;—coined by George Orwell in the novel *Nineteen Eighty-Four*.

DRIVE-IN: A place of business, as a theater, restaurant, designed to permit patrons to remain in their automobiles while watching a performance or making purchases.

DRONE: A pilotless airplane controlled by radio from the ground or another ship; also, a vessel similarly controlled.

DRUNKOMETER: A device for determining the degree of alcoholic intoxication by analysis of the breath.

DUB: To provide (a film) with a new soundtrack; to blend music or sound effects with (a radio or television broadcast).

DUCK: An amphibious military vehicle with rotating wheels and a propeller, that can be used as either a truck or a barge.

DYNEL: A synthetic textile fiber in rayon form; also, the material made from rayon fiber.

EARMOLD: The portion of a hearing aid that fits into the ear.

ECDYSIAST: A strip-teaser;—a humorous term coined by H. L. Mencken.

EGGHEAD: An intellectual; a highbrow.

ELDER STATESMAN: A man who has withdrawn from active public life but continues to serve as an unofficial advisor, especially to government officials.

ELECTRONICS: The branch of physics that deals with the emission, motion, and control of electrons.

ELECTROSHOCK: A state of shock induced by the passage of an electric current through the brain and useful in the treatment of certain mental disorders.

EMCEE: A master of ceremonies;—from

TO IMPROVE (a food) in nutritive by adding vitamins and minerals to processing.

TOR CLAUSE: A clause in a contract allowing adjustment to cover such possibilities as increases or decreases in costs of material, or living.

LITERATURE: Literature or writing giving mental escape or distraction from routine or reality.

TER: One whose job it is to ensure an adequate supply of raw materials for full production contracts and to direct movement of processed goods to where they are needed or wanted.

RE METER: An instrument used by photographers for indicating the correct amount of exposure under varying light conditions.

SWAY: A superhighway.

In radio and television, to change quality in loudness or distinctness (as, to *raise* a picture or a sound in or out).

TRADE AGREEMENT: An agreement between the manufacturer and the distributor of a trade-marked article, prescribing a minimum price for its sale.

BOAT: A collapsible boat similar in size and shape to a kayak.

WICK: Money that can be made readily and quickly, usually with little effort.

UNION RULE: A union rule that requires an employer to hire unneeded workers to pay for duplication of jobs; also, limiting the amount of work that a worker may do in a day.

LAZY MERCHANT, slang: One who tries to get easy jobs or is thought to be lazy; also, a *lazy* slang, a civilian.

ETTE: A short feature; specifically, a picture of less than the usual size.

BACK: A partial return of the effects or results of a process to its source or to a preceding stage;—used especially of social, psychological, or biological systems.

TRAVELER: One who sympathizes with and, often, furthers the program or policy of a group (originally, the Communist party) without being a member of the group.

COLUMN: Secret supporters of an engaged in sabotage or other subversive activity within defense lines.

PAINTING: A technique in which small areas of pigments (*finger paints*) are applied to wet paper and spread with the fingers or fingers to form a picture or design.

The splitting of the nucleus of an atom into two nearly equal parts, resulting in tremendous release of energy.

ABLE: Capable of undergoing fission.

AGENCY CENTER: One who undertakes to assist businessmen in obtaining contracts or other business with the government, usually for a fee of five per cent.

OUT: A sudden blowing-out of the flame of a jet engine, caused by improper operation of the fuel-supply system.

PHONOGRAPH CARTRIDGE: A phonograph cartridge that has separate needles for playing

both microgroove and standard records and that may be turned to bring the proper needle into playing position.

FLUFF: To bungle or stumble in delivering one's lines during a performance; also, to miss a cue.

FLUID DRIVE: An automotive power coupling between the flywheel of the engine and the transmission gears that operates on a hydraulic turbine principle.

FLUORIDATION: Treatment of drinking water with a fluoride to prevent tooth decay.

FLYING SAUCER: Any of various unidentified objects, usually described as disc- or saucer-shaped, reportedly seen in the air.

FOAM RUBBER: A spongy, fine-textured rubber used especially for cushions, mattresses and the like.

FOLD: To discontinue production or business for lack of patronage or because of public neglect (as, the stage play *folded* after only two performances).

FRAME OF REFERENCE: The environment of personal knowledge or experience in which an idea is conceived or interpreted.

FREELoader: A "sponge"; one who frequently obtains something (as food or drink) that is paid for by someone else.

FREEWAY: An express highway that bypasses towns and is largely free of intersections; a superhighway.

FREEZE: To fix inflexibly, as by an executive order, at a given level or in the status on a given day (as, to *freeze* a price or a design).

FREQUENCY MODULATION or FM: A virtually static-free system of radio broadcasting in which the frequency of the carrier wave is modulated in accordance with the form of the sound or signal wave.

FRINGE AREA: An area on the outer edges of one having a greater strength or concentration (as, a *fringe area* for television reception).

FRINGE BENEFIT: Any benefit, such as health insurance or sick leave, not included in the basic wage, that workers receive from their employers.

FROGMAN: A person equipped for extended periods of underwater swimming, usually for military reconnaissance or underwater demolition.

FRONT: A person or group serving as public representative for a pressure group or subversive organization, often unwittingly, while thinking to act in public or patriotic interests.

FUSED COLLAR: A collar, especially one on a man's shirt, that has been lined or otherwise treated to retain its shape.

GADGETEER: An inventor or maker of gadgets; also, one given to buying or using them.

GAGSTER: A writer of gags or jokes, especially for radio and television programs.

GAMMA GLOBULIN: A fraction of blood plasma rich in antibodies and used against diseases such as polio and hepatitis.

GAPA: A rocket-powered guided missile used against aircraft and against other missiles;—from ground-to-air pilotless aircraft.

GENOCIDE: A calculated attempt to destroy systematically a racial, religious, or political group.

- ical group; also, an effort to destroy the language, religion, or culture of a group.
- GERIATRIC:** Of or pertaining to *geriatrics*, the branch of medicine dealing with old age and its diseases; also, aged (as, the *geriatric* patient).
- GHETTO:** A quarter of a city in which members of a racial group are segregated by social and legal pressure.
- GI:** A person who is serving or has served as an enlisted member of the U. S. armed forces.
- GIMMICK:** A trick; a clever or artful device or scheme.
- GISMO:** A gadget; device; contraption; also, anything without a name.
- GIVEAWAY:** A radio or television show in which members of the audience participate and receive prizes.
- GOBBLEDYGOOK:** Involved or obscure language such as is frequently found in official pronouncements.
- GOLDBRICK, slang:** To shirk or find excuses to evade assigned work.
- GOOFBALL, slang:** A sleeping tablet, especially one of the barbiturates.
- GOOGOL:** In mathematics, the figure 1 followed by 100 zeros.
- GRASSROOTS:** The farming districts of the country; also, the people living in them, thought of as a politico-economic group holding firm and independent views.
- GRAVEYARD SHIFT:** The third of three daily shifts, as in a factory, usually beginning at midnight.
- GREEN THUMB:** A special or unusual ability to make plants grow;—usually in the phrase, to have a *green thumb*.
- GREMLIN:** An impish gnome, whimsically accused by airmen of tampering with motors, instruments, and the like.
- G SUIT:** An inflatable suit worn by aviators during rapid aerial maneuvers to counteract the effects on the body of pressure greater than gravity.
- GUIDED MISSILE:** Any missile whose course may be directed during passage by a built-in target-seeking device or by radio control.
- GUN:** To open the throttle of (an engine) to increase the speed.
- GYROPILOT:** A control mechanism, sometimes called *automatic pilot*, that keeps an airplane in level flight and on a set course.
- HALF-TRACK:** One of the endless chain-tracks used instead of the rear wheels on a certain type of vehicle; also, a tractor or truck with half-tracks and front wheels.
- HARDTOP:** An automobile having most of the characteristics of a convertible, but with a stationary steel top.
- HASSLE:** A mix-up; also, an argument or fight.
- H-BOMB or HYDROGEN BOMB:** An extremely powerful fusion bomb.
- HEDGEHOP:** To fly an airplane so low that it has to "hop" over trees and hedges.
- HELIPORT:** A place for helicopters to land in order to discharge or receive passengers or cargoes.
- HEPCAT:** A musician in a jazz band; also, a devotee of jazz.
- HEX:** A spell or enchantment; a jinx (put the *hex* on someone).
- HIGH FIDELITY or HI-FI:** The reproduction of sound, usually by a radio or phonograph, with a high degree of faithfulness to the original.
- HIT PARADE:** A listing, as of popular songs, books, in order of current public preference.
- HOOD, slang:** A hoodlum; a rowdy.
- HOOPER or HOOPERATING:** An individual based on the results of telephone polls of the popularity of a radio or television program.
- HORSE'S TAIL = PONY TAIL, below.**
- HOT:** Radioactive; also, having to do with radioactive material (as, a *hot* laboratory).
- HOT ROD, slang:** An out-of-date automobile with the trimmings stripped off and an engine stepped up to permit high speeds.
- HOWGOZIT CURVE:** A running graph of the progress of an aircraft flight, especially a transoceanic one.
- HUCKSTER:** One whose business is commercial advertising, especially the preparation of clever, effective advertising programs for radio and television broadcasts.
- HYBRID CORN:** A crossbreed of Indian corn developed from selected strains and having the best characteristics of each.
- HYDROPONICS:** The growing of plants, especially vegetables, with their roots in a liquid that contains the essential minerals instead of in soil.
- HYPERTENSION:** Abnormally high arterial blood pressure; also, the resulting systemic condition.
- INFLUENCE PEDDLER:** One who tries to obtain special privileges, especially from the government, for his clients; a five-percent man.
- IN-SERVICE:** Taking place or continuing while in service (as, *in-service* training).
- INSTITUTE:** A short program of instruction or conferences for people already active in a given field (as, a farmers' *institute* or a bankers' *institute*).
- INTERCOM:** A two-way short-distance communication system with microphones and loud-speakers at each end;—short for *intercommunication system*.
- IRON CURTAIN:** A barrier created by means of censorship and prohibition of free travel to isolate Russian-controlled territory from outside contacts; hence, a similar barrier against communication.
- IRON LUNG:** A tank device for artificial respiration that forces air into and out of a patient's lungs.
- ISOBAR:** One of two atoms or elements having the same atomic weights but different atomic numbers.
- ISRAELI:** Of or relating to the Jewish state of Israel, in Palestine.
- ISSEI:** A Japanese immigrant to the United States, legally, an alien.
- JATO UNIT:** An auxiliary means of propulsion in which rocket engines are used to assist the take-off of an airplane;—from *jet* and *take-off*.
- JEEP:** A small, rugged multipurpose motor vehicle; originally one having four-wheel drive.

PROPULSION: Propulsion of a body by force resulting from the rearward discharge of a jet (a high-speed stream of gas) through an orifice. The forces are reaction to the discharge of the jet, in accordance with the Newtonian law that for every force there is an equal and opposite reaction.

The slang or jargon used by swing dancers and jitterbugs; also, any similar

COIN: A coin-operated automatic phonograph record player.

SLANG: A narcotics user or addict.
SIAN: Of or pertaining to a system of economics (often associated with the Deal) advocating considerable government participation in the economic life of a country.

BACK: The return of part of a sum paid, as of wages or fees, prompted by previous confidential agreement or by custom.

COPE: A form of cathode-ray tube used as a screen at one end on which television pictures or oscillographs may be projected;—called also *picture tube*.

CS: The study of such body motions as links and waves as related to communication between people.

HOW: Technical skill and practical knowledge; competence in planning or preparing something.

G CRAFT: Any of numerous naval aircraft designed for putting ashore troops and equipment in beach assaults.

ATTACH TO: To attach oneself; also, to appropriate; to take over.

ONE: One who belongs to a radical or revolutionary party; also, one who holds extreme ultraliberal principles.

IN TEST: A test for the recognition of leprosy.

TO: The plan or scenario for a ballet.
ATE: To kill secretly; also, to eradicate ruthlessly.

A: A man's or woman's low leather shoe, resembling a moccasin but with a flat heel and stiff outsole.

MY: A leucotomy; an incision into the frontal lobe of the brain to sever nerve fibers in an attempt to relieve certain mental disorders.

PLANT: A business establishment using quick-freezing equipment and facilities for storing frozen foods.

IR: Idealistic; intellectualized; high-class; *longhair* music or *longhair* writing.

OATH: A signed statement of loyalty, often one in which the signer affirms loyalty to the U. S. and denies any Communist connections or sympathies.

ISM: A biological doctrine advanced by D. Lysenko, Russian agronomist, in the name of orthodoxy genetics.

ST: A yellow life-saving jacket that is inflated by two cartridges of carbon dioxide, worn especially by airmen in the event of a crash landing over water.

ATH: One million deaths (as, the death toll of an atomic bomb may be indicated in terms of *megadeaths*).

MEGATON: A million tons; also, an explosive force equal to that of a million tons of TNT;—used especially with reference to a hydrogen bomb.

MERCY KILLING: Euthanasia; killing, especially in a quick, painless manner, to put the victim out of extreme pain or misery.

ME-TOO-ISM: The echoing of another's opinions or attitudes, usually implying an inability or unwillingness to think for oneself.

MICROFILM: A strip of film on which a reduced-size photographic record of printed matter may be kept in a small space.

MICROGROOVE: A narrow V-shaped groove used on phonograph records intended to play at speeds of 33 1/3 or 45 revolutions per minute.

MIDDLEBROW: Middle-class; midway between highbrow and lowbrow.

MILK BAR: A place where milk, ice cream, and other dairy products are sold and may be consumed.

MOBILE: A delicately balanced type of sculpture, usually having movable parts which can be set in motion by air currents or other means.

MOLOTOV COCKTAIL: A crude explosive device, typically, a gasoline-filled bottle capped with an oil-soaked rag that is ignited just as the bottle is thrown at the target.

MOMISM: A supposed excessive admiration and sentimentalizing of mothers, thought to permit a possessive mother to deny her offspring emotional independence.

MONITOR: To check (a radio or television transmission) for quality or fidelity to band; also, to check (as a broadcast) for military or political significance.

MONOLITHIC: Consisting of one large, undifferentiated whole, exhibiting one harmonious pattern throughout (as, a *monolithic* party or culture).

MONTAGE: The production of one complete picture by combining several distinct ones, often in such a way that they blend with or into each other.

MORETIC: Pertaining to mores or social conventions.

MOTEL: A hotel or group of furnished cabins or attached cottages, situated near a highway, offering accommodations to automobile tourists.

MOTHBALL: That which has been placed in indefinite, protective storage (as, a *mothball* fleet or airplane).

MOTORCADE: A parade or procession of automobiles.

MOTOR POOL: A group or fleet of motor vehicles for use as needed by different organizations or individuals.

MULTIPHASIC: Having or considered in terms of many aspects or phases (as, a *multiphasic* approach to a problem).

MUSCULAR DYSTROPHY: A hereditary disease in which there is progressive wasting away of the muscles.

NAPALM: A thickener used to gel gasoline for incendiary bombs and flame throwers.

NEEDLE: To vex or annoy by repeated sharp gibes; also, to goad or prod.

- NEWSCASTER:** One who broadcasts news, as on radio or television; also, a commentator.
- NIACIN:** A member of the B-vitamin group useful in the prevention of pellagra;—called originally *nicotinic acid*.
- NISEI:** A U. S. citizen born of Japanese immigrant parents.
- NONOBJECTIVE:** In art, creating effect through shapes and colors not intended to represent actual objects; abstract.
- NO-SHOW:** A passenger who, after making a reservation on an airplane, does not show up to claim it at flight time and has made no cancellation.
- NUCLEAR:** Having to do with the atomic nucleus (as, *nuclear physics*).
- NURSERY SCHOOL:** A center for children, usually under 5 years of age, providing supervised play and social training for a few hours a day.
- NYLON:** A synthetic material that can be fashioned into tough, strong, elastic threads and used in making brush bristles, hosiery, textile fabrics and the like.
- OCCUPATIONAL THERAPY:** The treatment of disease or injury by giving the patient regulated work that will help his recovery or rehabilitation.
- OMNIBUS:** A book of reprints, usually one containing works of the same type or by a single author.
- OPPOSITE NUMBER:** A person or position in one system corresponding to one in another (as, an ensign is the *opposite number* of a second lieutenant).
- OSCAR:** One of the statuettes awarded annually for highest excellence in motion picture work; hence, any annual award for excellence.
- PACKAGE:** A fully constructed, prearranged program or plan, such as a radio show or tour, usually offered for sale at a flat sum; also, any finished product made ready for immediate use by preassembling all essential elements into a unit.
- PAN:** To move (a camera) in order to follow a moving object or secure a panoramic effect.
- PANIC SWITCH:** The control on the ejector mechanism that throws a jet pilot from his plane in case of emergency.
- PARAPSYCHOLOGY:** A branch of psychology concerned with investigating evidence for telepathy, clairvoyance, and the like, and with experiments in the field of extrasensory perception.
- PARA-RESCUE TEAM:** A team of rescuers who drop by parachute, as to the scene of a plane crash, in order to give immediate aid to anyone in distress.
- PARITY:** The balance between the prices the farmer receives for his products and the prices he has to pay for the things he must buy.
- PARTISAN:** A member of a guerilla band working behind enemy lines and engaged in such activities as sabotage, demolition, and diversionary attacks.
- PARTY DISCIPLINE:** The discipline imposed on its members by a party;—usually applied to the Communist party.
- PARTY LINE:** The policy or course of action followed by a party, originally specified by the Communist party.
- PATCH TEST:** A test for determining suitability, made by applying to the skin: pads soaked with the allergy-producing substance in question.
- PEDAL PUSHERS:** Women's trousers, usually calf-length, for sports wear.
- PENICILLIN:** An antibacterial substance extracted from green mold, useful in treating infections.
- PERIL POINT:** The lowest rate to which a tariff can be reduced without injuring the industry of the country levying it.
- PHOTOMURAL:** An enlarged photograph, usually several yards long, affixed to a wall as decoration.
- PICTURE TUBE = KINESCOPE.**
- PICTURE WINDOW:** An extra-large window, usually in a living room, framing a viewable outside view.
- PIGGY-BACK PLANE:** A small airplane carried aloft on the "back" of a larger one, from which it is released in mid-air.
- PIPE:** In radio and television, to transmit (a program) by wire or coaxial cable.
- PIZZA:** A large flat tart made of bread dough spread with pieces of tomato, cheese, and shreds of meat, anchovies or the like, and flavored with herbs, and baked thoroughly.
- PIZZERIA:** A restaurant or bakery where pizzas are made and sold.
- PLATTER:** A phonograph record.
- PLUNGING NECKLINE:** A very deep V-neckline in women's apparel.
- PLUSH:** Luxurious; over-elegant (as, a summer resort).
- POLICE STATE:** A totalitarian state having repressive government control of the press, culture, and economic and political life.
- POLITIC:** To campaign for political office; also, to seek to further a special end.
- POLLEE:** One who is questioned in order to get answers for a poll.
- POLO SHIRT:** A close-fitting pullover or sport shirt of cotton knitwear, originally patterned after jerseys worn by polo players.
- PONY TAIL:** A hairdo for women, in which the hair is drawn back tightly from the face and up from the neck, and tied.
- POODLE CUT:** A very short, curly haircut for women, in imitation of a poodle's coat.
- POP:** Short for *popular*;—used especially of music other than classical.
- PORTAL-TO-PORTAL:** Pertaining to the fact that a workman spends traveling from the factory to the gate of company property to reach his actual place of work and in returning to the end of the work shift.
- PREFAB:** A prefabricated house or structure, the construction of which consists merely of assembling and uniting standardized parts.
- PRESSING:** A phonograph record made on a matrix; also, the whole number of recordings made at a single time.
- PRESSURE GROUP:** A minority group which brings pressure to bear on legislative public opinion, often by lobbying or by the use of propaganda, to force legislative change public policy.

SUITSUIT: A suit worn by pilots flying high altitudes, which inflates automatically when pressure inside the plane drops.

URIZE: To maintain near-normal atmospheric pressure inside (the sealed cabin of an airplane) during high-level flight.

TE EYE: A private detective.

LE: A vivid, concise biographical sketch; also, a concise analysis of any subject.

MITY FUZE: A device for making a projectile explode near the target.

ODRAMA: A spontaneous drama in which the actors exhibit their natural psychological reactions to a given situation, especially in treating the mentally ill.

OMETRICS: A branch of psychology which deals with the use and application of physical measurement; also, the technique of such measurement.

OSOMATIC: Of or pertaining to the influence of mental factors on bodily disorders.

RELATIONS: The activities of a corporation, government, or other organization in building and maintaining good relations with the general public or with special interests.

CARD: A data card with punched holes in particular places, each having an assigned significance, used in certain automatic business machines.

TO RID: (a state or party) of members expelled of disloyalty.

VER: An opponent easily defeated or a team incapable of effective resistance; also, any problem presenting no real difficulties.

ERBACK: To direct; to make plans; to give instructions for carrying them out.

FREEZE: To freeze (food) so rapidly that the natural juices and flavor are preserved.

E: Anything hastily prepared or made; something done without much preparation.

EARS: A small indoor television antenna composed of two rods projecting out from a ball-base in the form of a Y.

: The assumption that certain races are naturally superior to others; also, any line or program based on such an assumption.

A: A powerful radio detecting device capable of establishing the distance, altitude and direction of motion of any object in the path of its beam.

T HEATING: The heating of a house or room by heat radiated from large surfaces such as floors, walls, or baseboards, which have first been warmed by heating coils or hot-air ducts.

ON SICKNESS: An illness that results from exposure to radiation, as in radioactivity or an atom bomb explosion.

HOUSE: A one-story dwelling, usually with an informal interior plan and a flat pitched roof.

REACTOR: An arrangement of fissionable material designed for the production and control of a chain reaction;—called also *nuclear reactor* and *pile*.

RECESSION: A slowing down of commercial and industrial activity, less severe than a depression; also, a period of such slackening.

RECONVERSION: The process of converting (especially a war plant) back to the production of civilian goods.

RED-BAITER: One who baits, attacks, or harasses communists or radicals.

REFRESHER: Providing reinstruction after a period of inactivity or instruction designed to keep one abreast of new developments in a field (as, a *refresher* course in auto mechanics).

RESISTANCE: An organized underground movement in a conquered country made up of groups of fighters engaged in sabotage and secret operations against occupation forces;—often with *the*.

REV: To raise or lower the number of revolutions per minute;—originally, of an airplane motor.

Rh FACTOR: A factor present in the red blood cells of 85 per cent of white persons (Rh-positive) and absent in 15 per cent (Rh-negative), so called because discovered in the blood of Rhesus monkeys. Rh incompatibility is manifested by red cell destruction and occurs when the two types are mixed in one person, especially as in the infant of an Rh-positive father and Rh-negative mother.

RHUBARB: A heated argument or dispute, often one that takes place on the field during a baseball game.

RIBOFLAVIN: Vitamin B₂, the growth-promoting substance of the vitamin-B group.

RIGHTIST: In politics, a member of the right; a conservative or royalist.

ROBOT BOMB: A small, pilotless jet-propelled airplane, steered by a gyroscopic device and loaded with explosives, that falls as an aerial bomb when its fuel supply is gone.

ROC: An aerial bomb with a television apparatus that transmits information back to the bombardier, who may then correct his initial aim by remote radio control.

ROCKET SHIP: An aircraft propelled by rocket power.

ROLLER DERBY: A form of sport in which teams on roller skates race around a track.

ROTATION: The military system of exchanging individuals or units assigned to combat or arduous duties with personnel more comfortably situated.

RUMPUS ROOM: A room in a home, often in the basement, set apart and suitably furnished for games and recreation.

RUPTURED DUCK: The symbol of an eagle with wings outspread depicted in the discharge emblem for personnel of the U. S. armed services.

RUSSIAN ROULETTE: A game or act of bravado in which the "player" puts one cartridge into a revolver, aims it at himself, spins the cylinder, and pulls the trigger.

SATELLITE: A state or country politically

- and economically dominated by a more powerful neighboring one.
- SCAN:** In radar, to cause (a certain area) to be traversed by a directive beam.
- SCARE BUYING:** Sudden buying, often involving an overstocking, of certain goods because of the fear that they may become scarce or unobtainable.
- SCHMOE or SCHMO, slang:** A stupid person; a misfit; a jerk.
- SCIENCE FICTION:** Imaginative or fantastic fiction, dealing especially with such subjects as life in the future, interplanetary travel, and life on other planets.
- SCRATCH TEST:** A test for determining susceptibility, made by rubbing an extract of the allergy-producing substance into the skin.
- SCREEN:** To pass through a standardized test for sorting out candidates according to abilities or eliminating the unfit; hence, to examine or select methodically.
- SCREWBALL:** Someone whose ideas or actions are crazy or fantastic; also, anything ridiculously absurd or zany.
- SCRIPTER:** A writer of scripts, as for movies, radio, or television.
- SEND:** In swing music, to perform with or inspire to spontaneous improvisations; also, to play so as to elate a listener.
- SHAKEOUT:** A moderate slowing down of commercial and industrial activity with a decrease in prices and employment, usually regarded as a readjustment toward normal after a period of inflation.
- SHARP, slang:** Conspicuously attractive; in keeping with the latest styles, as of clothing or speech.
- SHOCK THERAPY:** Treatment of mental disorders by means of a coma induced artificially by the administration of drugs or electric shock.
- SHOOTING WAR:** Conflict involving actual participation of armed forces in combat, as opposed to a war of nerves or a propaganda war.
- SHOPPING CENTER:** A group of retail stores or other business places, sometimes in one building, and usually provided with a large parking lot.
- SIGNATURE:** A tune or sound effect used to identify a particular radio program or feature;—called also *theme*.
- SILK SCREEN PROCESS:** A stencil method in which a design is made on a fine-mesh silk screen and transferred to another surface by forcing pigment through the screen with a squeegee.
- SIMULCAST:** A simultaneous broadcast of a program by radio and television; also, a program thus broadcast.
- \$64 QUESTION:** The most baffling question in a given situation, often one that defies direct answer.
- SKIP-STOP:** Not stopping at all points (as, *skip-stop* elevator or subway service).
- SKYSWEEPER:** A radar-aimed anti-aircraft weapon.
- SKYTYPING:** A technique, similar to skywriting, in which seven equally spaced aircraft emit puffs of smoke to form the letters of a message.
- SLICK or SLICK PAPER:** A large-circulation magazine printed on glossy paper;—also implies slightness of content and technical smoothness.
- SMAZE:** A combination of smoke and haze.
- SMEAR:** To defame or blacken the reputation of a person or group by name-calling or by maliciously spreading exaggerated charges or rumors.
- SMEAR CAMPAIGN:** A concentrated program of vilification and smearing.
- SNACK BAR:** A counter or bar at which refreshments and lunches are sold or served.
- SNEAK PREVIEW:** An unannounced showing of a new motion picture, usually to determine audience reaction to it.
- SNOLLYGOSTER:** A rascal or an unscrupulous person, especially an unprincipled politician.
- SNOW:** Small, moving, bright or dark spots on a television screen, resulting from the same causes as static in radio.
- SOAP OPERA:** A daytime radio or television drama performed on a commercial program chiefly for housewives.
- SOCIALIZED MEDICINE:** Administration of medical or other organized group medical and hospital services for all members of a class or all members of the population.
- SONAR:** An apparatus that detects the presence and location of submarines or other underwater objects;—from sound navigation and ranging.
- SOUFFLÉ:** Tiny multicolored beads of glass or metal, used for embroidery.
- SOUND CONDITIONING:** The control of sound as in an auditorium, by eliminating unwanted noise and excessive reverberation.
- SOUP UP:** To step up the horsepower of a motor, as on an airplane or a jalopy.
- SPACE:** Popularly, the region beyond earth's atmosphere, lying between and beyond the planets and the stars.
- SPACE MEDICINE:** A suggested branch of medicine which would try to study conditions of outer space and their effect on the human body.
- SPACESHIP:** An imaginary aircraft for interplanetary travel.
- SPEECH CLINIC:** A clinic for the diagnosis and correction of speech disorders.
- SPELUNKER:** One whose hobby is exploring and studying caves and underground phenomena.
- SPIV, slang:** One who contrives to make a living without working; a slacker.
- SPLINTER GROUP:** In politics, a group broken away from a larger, original organization.
- SPLIT-LEVEL HOUSE:** A house built on different levels, usually with the floor level of a single-story section about midway between the floor levels of an adjoining two-story section.
- SPOTTER:** A civilian who watches the sky report and identify approaching aircraft.
- STATELESS:** Without a state or nation; as a person who was a citizen of a country no longer in existence.
- STATESIDE:** Of, pertaining to, characteristic of, or coming from the continental United States.

a transfer from Europe to *stateside*

NARY FRONT: In meteorology, a boundary between two air masses which move little or no movement.

N BREAK: In radio and television, the break in a program or between programs permit stations to identify themselves.

N WAGON: A sedanlike automobile with a tail gate and back seats that can be moved or folded so the vehicle can be used for light trucking.

NM: Government control or direction of important aspects of the economic life of a citizen.

PHONIC: Of reproduced sound, giving the effect of coming from two or more directions.

CAR RACING: Automobile racing in which ordinary cars are used rather than specially constructed racers.

PILE: A reserve supply of any essential material accumulated and stored as a safeguard against a shortage.

COAT: A tailored winter coat for men or women, usually having a heavy collar and a mouton collar, and often of gabardine.

AT CIRCUIT: A summer theater circuit often including the more popular areas.

OMYCIN: A substance extracted from soil bacteria and used against the bacteria of certain diseases, as typhoid, tularemia, and tuberculosis.

Of or belonging to a class of drugs which are related to sulfanilamide and have destructive action against certain types of bacteria.

IGHWAY: A highway consisting of four or more lanes, designed for fast-moving traffic.

MARKET: A large, departmentalized store, usually self-service, selling groceries and other household merchandise.

ONIC: Designating a speed greater than that of sound (about 738 miles per hour), also, moving or capable of moving at that speed (as, a *supersonic* aircraft).

SHIFT: The work shift between the day and night shifts in a factory operating on a 24-hour basis, usually from 4 p.m. to 4 a.m.

In motion pictures and television, used to synchronize or synchronization.

OME PAY: The remainder of a person's gross wages after deductions, as for income-tax withholding, retirement, and dues, have been made.

magnetized ribbon on which sounds are recorded. — To record (sounds) on magnetic ribbon.

AMERA: A television camera.

T: A program broadcast by television to be broadcast by television.

R-IN-THE-ROUND: A theater so arranged that the action area is in the center and the audience is seated on all sides of the stage, also *arena theater*.

NUCLEAR: Pertaining to the heat or energy resulting from or connected with the nucleus of atoms.

THIAMINE: A vitamin, also known as *vitamin B₁*, that prevents beriberi and certain kinds of neuritis.

THOUGHT CONTROL: Repressive control or domination of individual ideas and thinking by another person or group.

THREE-DIMENSIONAL or 3-D: Giving the illusion of depth or varying distances;—applied to pictures, especially stereoscopic motion pictures.

TONE ARM: The movable part of a phonograph that contains the sound box or pickup and permits the needle to follow the grooves in the record.

TOP-DRAWER: Of the highest or first order of rank, excellence or importance.

TRACE ELEMENT: A chemical element, usually a metal, essential in minute amounts to the welfare of a plant or animal.

TRANSISTOR: An electronic device similar in use to the electron tube.

TWEEDY: Given to or fond of wearing tweeds;—usually implying a certain matter-of-factness, robustness or informality of manner.

TWEETER: A small loudspeaker that responds only to high sound frequencies and is used to reproduce sounds of high pitch.

2,4-D: A white crystalline compound used as a weed killer.

ULTRAHIGH FREQUENCY or U.H.F.: In radio and television, any frequency in the range from 300 to 3000 megacycles.

VEEP: A vice-president.

VERY HIGH FREQUENCY or V.H.F.: In radio and television, any frequency in the range from 30 to 300 megacycles.

VIDEO: *Television.* Pertaining to or used in sending or receiving the image (as, *video frequency*). Contrasted with *audio*.

VIDEOCAST: A television broadcast.

VIP: A very important person; sometimes, one using an assumed name for security reasons.

WALKIE-LOOKIE: A portable, battery-operated television camera.

WALKIE-TALKIE: A compact, battery-operated transmitting and receiving radiotelephone that is carried like a knapsack and especially adapted for communication in the field.

WATER SKIS: Wide skis which are towed by a fast motorboat and are ridden like a surfboard.

WEEDICIDE: Any weed killer, especially a chemical one, as 2,4-D.

WELFARE STATE: A state that, by its concern with public health, insurance against sickness and unemployment, and other similar measures, assumes a large share of responsibility for the welfare of its citizens.

WETBACK: A person who enters the U. S. illegally from Mexico by wading or swimming the Rio Grande River.

WHAMMY: A curse or jinx (as, to put the *whammy* on a person).

WITCH-HUNT: A searching out of victims, especially liberals, professedly to expose them as disloyal or subversive, but actually to harass them for political reasons.

WOOFER: A loudspeaker, larger than a tweeter, that responds only to lower sound frequencies.

ZOOT SUIT: A suit of extreme cut, usually having a long jacket with broad shoulders and high-waisted peg-top trousers.

Words Frequently Misspelled

(Here spelled correctly)

abbreviate	annul	bleach	commissary	cyclone
abeyance	annulment	bonnet	commission	cygnet
abolition	anomaly	bouillon	committee	cylinder
abridge	anonymous	boundaries	commodore	cylindrical
abscess	answer	bouquet	comparable	
absence	antechamber	bourgeoisie	compatible	daffodil
absorption	antediluvian	brilliant	compel	dahlia
abstinence	antenna	browse	compelling	damage
abysmal	anticipate	bullion	complexion	dearth
abyss	antidote	bunion	compromise	debatable
accede	apologize	buoyancy	concede	debilitate
accelerate	apoplexy	bureaucracy	conceit	decadence
accessory	appalling	business	conceive	deceased
accidentally	apparatus		concomitant	deceitfully
acclaim	appreciation	cafeteria	concupiscence	deceive
accommodate	appurtenance	callously	concurrence	decision
accompaniment	argosy	calorie	condemn	defendant
accordance	argument	candidacy	condescension	deference
accredit	arraign	cantaloupe	connaisseur	defiant
accumulate	ascend	canteen	conscience	definitely
accuracy	ascension	capitalize	conscientious	delegate
achieve	ascertain	captaincy	conscious	delicacy
acknowledge	asinine	caress	consecrate	demise
acoustic	aspirant	carillon	consistent	denouement
acquaintance	assassinate	carriage	conspicuous	descendant
acquiescent	assistance	carrot	conspiracy	desecrate
acquire	association	cartilage	constituency	desiccate
acquisitive	assurance	casualties	constituent	despair
acquit	attendance	ceiling	consulate	desperate
acrimony	attenuate	cemetery	contaminate	despicable
across	attorney	chalet	contemptible	despise
adaptation	audible	challenge	contemptuous	despondent
addition	audience	chamois	contentious	detachable
address	autumn	champagne	continually	deterrent
adept	auxiliary	changeable	controversy	development
adequacy	azalea	character	convalescent	diabetes
adolescence		chauffeur	convenient	diaphragm
adventitious	babyhood	chemise	convertible	dictionary
advocacy	bacchanalia	cherub	cooling	diesel
affable	bachelor	chicory	cordially	different
aggravate	baggage	chief	corollary	diffident
aggregate	banana	chilblain	correlate	dilapidated
aggressive	barbecue	chivalrous	counterfeit	dilatory
aghost	barbiturate	choosing	counterrevolution	dilemma
align	battalion	chronicle		dilettante
alleged	believe	chrysanthemum	courageous	diligent
allegiance	beneficiary	cipher	courteous	dimension
allotment	benefited	circuit	court-martial	dimity
all right	benign	circumstantial	crescent	dining room
allure	bereave	civilize	critically	diphtheria
amateur	besech	civility	crochet	diplomacy
amenable	beverage	clumsily	croquet	disappear
analogous	bibliography	coarsen	cruelty	disappoint
analysis	bicycle	cocoa	cunning	disapprove
annals	biennial	codicil	curriculum	disastrous
annihilate	bigoted	column	cursor	discern
annually	bilious	coming	custodian	discipline
annuity	blasphemous	commencement	customary	disconsolate

ancy	equally	gauze	indefatigable	legendary
on	equipped	genealogy	indefeasible	legitimate
ion	erratic	genre	indefensible	leisure
ge	especially	ghastly	indelible	leprosy
e	ethereal	gibber	independence	lettuce
faction	evanescent	giblets	indict	liable
le	eventually	gingham	indigenous	librarian
er	evidently	gizzard	indiscriminate	ligament
ar	evilly	globule	indispensable	likelihood
e	exaggerate	government	individuality	limousine
on	exasperate	gradient	indivisible	liquor
s	exceed	grammar	inexhaustible	litany
ry	excel	grateful	infallible	livelihood
ut	excellent	gratitude	influential	loathe
e	exception	grievous	inimical	loneliness
pper	excerpt	grimace	innate	lonely
c	excess	gruesome	innocuous	loosely
ent	excessive	guaranteed	inoculate	lunacy
y	excise	guidance	insensate	luscious
wn	excitement	haggle	inseparable	mackerel
ary	excrescence	hallucination	insistence	mackintosh
ent	execrable	handkerchief	intellectually	maddening
y	exhaust	harass	intercede	maggot
own	exhibit	harness	interpret	maintenance
ary	exhilarate	heifer	interracial	malaria
e	exhort	height	interrupt	manacle
ssment	exhume	heresy	intimidate	maniacal
t	existence	hideous	introvert	manufacturer
cally	exorbitant	historically	irreconcilable	marmalade
ge	expedient	hoary	irrefutable	massacre
e	experience	homogeneous	irresistible	mayonnaise
ssment	extension	horoscope	irrespective	measles
t	extenuate	hygiene	irreverent	mediocre
cally	extinguish	hypnotic	irrigate	mediocrity
ge	extraordinary	hypocrisy	isosceles	mellifluous
e	extravagant	hypocrite	jaundice	metamorphosis
ssment	exuberant	hypocritical	jealousy	meteorology
t	exultant	hysterically	jeopardy	millionaire
cally	fallacy	idiocy	jockey	mimicking
ge	fallible	idiosyncrasy	jollity	mimicry
e	fascinate	idolatrous	journeyman	miniature
ssment	fiery	illegitimacy	joviality	miscellaneous
t	filament	illegitimate	jovially	mischievous
cally	financier	illiterate	jugular	misspell
ge	fissure	illlogical	kaleidoscope	moccasin
e	flaccid	imaginary	khaki	mortgage
ssment	fluorescent	imbecile	kiln	mountaineer
t	forcible	imitate	kimono	mountainous
cally	foreboding	immaculate	kindergarten	mulatto
ge	foresee	immeasurable	knead	murmur
e	forsythia	immediately	knowledge	mysterious
ssment	fracas	immorality	laboratory	naphtha
t	fragility	immune	labyrinth	narcissus
cally	friar	impeccable	lacquer	nascent
ge	friend	impertinent	ladle	naturally
e	frivolous	implement	ladylike	nausea
ssment	fugue	improvise	language	nauseous
t	fulsome	incensed	laryngeal	necessarily
cally	functionary	incessantly	larynx	necessitate
ge	fundamentally	incidentally	lascivious	niece
e	gabardine	incise	latitude	niggardly
ssment	gagged	incongruous	lattice	ninth
t	gamut	incorruptible	leaven	noncombatant
cally	garrulity	incredible	legacy	noticeable
ge	gaseous	indebted		notoriety

obedience	pompous	referable	sanitarium	succeed
obelsance	pontiff	referee	sassafras	success
obligate	pontificate	reference	scandalous	succor
obscene	portrait	referendum	scenario	sufferance
obsession	possessive	refraction	scentless	superintend
obstacle	possibility	rehearsal	schedule	supervise
obstinate	potatoes	relevant	schism	supplement
occasion	practicability	religious	scintillate	suppress
occurrence	precede	reminiscence	scourge	surfeit
oddy	precedence	renaissance	scurrilous	surfeited
offensive	precedent	renounce	scythe	surprise
official	precocious	renown	secede	surveillance
ominous	predecessor	renunciation	sedentary	susceptible
omission	preferable	repellent	seesaw	syllable
oneself	prejudice	repercussion	segregate	symbolically
operator	presence	repertory	seize	symmetrical
opportunity	presumptuous	repetitious	self-reliant	symmetry
opposite	prevalent	reprieve	sensitive	syphilis
optimist	primeval	rescind	sensual	systematic
origin	privilege	resemblance	sententious	
oscillate	probably	reservation	separate	taffeta
ostentatious	proceed	reservoir	serviceable	talisman
outrageous	professor	residual	severely	tariff
oxidize	promenade	resilient	shellacking	tattooing
	pronunciation	resistance	shield	technicality
palatable	propaganda	resonance	shriek	temperament
pamphlet	propeller	respectively	siege	temperature
panacea	protein	respite	sieve	tempestuous
pantomime	pseudonym	responsible	significance	temporary
parallel	psychoanalysis	restaurant	similar	tenacious
parliamentary	psychology	resurrect	sirocco	tendon
paroled	ptomaine	retalliate	skein	tenement
parricide	publicly	retina	skillet	tension
participle	pursuit	retrieve	sleigh ride	tentacle
particularly	pyramid	reveille	sleight of hand	testament
pastime		revelation	slimy	theirs
patience	quadruped	reverence	slovenly	thief
pavilion	quandary	reversible	sluggish	thoroughfare
pedant	quarantine	revolution	sluice	thousandth
pedestal	quarrelsome	rhapsody	smorgasbord	threshold
penicillin	quay	rhetorically	so-called	thunderous
perceive	querulous	rheumatic	soccer	tidiness
perennial	queue	rhinestone	solder	timorous
peripatetic	quixotic	rhinoceros	solecism	tinselly
permissible	quizzes	rhododendron	soluble	titillation
perseverance	quizzical	rhythm	solvable	tobacco
persistent		rickety	somersault	toboggan
personality	racketeer	ridiculous	sophisticated	tolerant
personnel	ragamuffin	righteous	souvenir	tomatoes
perspiration	railery	riotous	spacious	tonsillectomy
persuade	rapidity	riveter	spatial	tonsillitis
physician	ravenous	rueful	specimen	toque
pianos	realize	rummage	spigot	torrential
picnic	really	runaway	sponsor	tortoise
picnicking	rebus	rutabaga	squalid	tournament
piecemeal	recalcitrant		squalor	tourniquet
perce	recede	sabotage	stabbing	trachea
pigsty	recept	sachet	staccato	tradition
pilgrimage	receive	sacrament	statue	trafficking
pillory	recipe	sacrificial	stoically	tragically
pinion	recipient	sacrilege	straightway	transcender
piteous	recognition	sacriligious	strait-laced	transept
playwright	recollect	sadism	stubbornness	transient
plebiscite	recommend	saffron	subsidize	transparent
pneumatic	recoup	salient	substantial	transubstanti
pneumonia	recruit	sanatorium	subtle	tion
	redolent	sanctuary	subtlety	trauma
				tread

dous	tyrannical	untenable	virile	whooping cough
tion	tyranny	unwieldy	virtual	whore
ry	tyrant	upbraid	visibility	wield
	ukulele	usually	visionary	withhold
al	ulcerous	utensil	vitality	witticism
	ultimate	utilize	vitaly	wizard
au	unadulterated	utopia	voluminous	wondrous
	unalloyed	vaccinate	voluntarily	wooling
	unanimous	vacillate	warrior	worried
	uncomplimen-	vacuum	weakling	worrying
	tary	valet	weasel	wrapper
losis	unconscionable	vanilla	weather vane	wreak
uous	unctuous	vegetable	weighing	wrestle
ine	undoubtedly	vehicle	weird	yacht
	unexceptionable	venereal	welcome	yield
	unguent	vengeance	whalebone	zealous
	unparalleled	vermillion	wheelde	zoology
	unprecedented	vigilance	whimsical	zwieback
	unpredictable	villify	whirl	
	unrequited	villain	wholly	

Forms of Address

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Address: The Right Reverend _____
_____, Abbot of _____, Begin: Right
and dear Father.

Address: Honorable _____
Dear Sir.

Address: His Excellency, _____
_____, Ambassador of _____ at _____
Sir; or Excellency.

or and his wife. Address: His Excel-
The _____ Ambassador and Mrs.
_____. Begin: Your Excellencies.

p (Anglican). Address: The Most
and His Grace the Lord Archbishop
_____. Begin: My Lord Archbishop; or
Grace.

p (Roman Catholic). Address: The
Reverend _____, D.D.,
shop of _____. Begin: Your Ex-
y.

n. Address: The Venerable The
acon of _____. Begin: Venerable

cers. Address: The Commander in
Army of the U. S.; or (use officer's
_____, U.S.A. Begin: Sir;
dear General _____.

man. Address: The Honorable _____
_____, Member of Assembly; or Assembly-
_____. Begin: Sir; or My dear Mr.

Secretary (Assistant to a Cabinet Offi-
Address: Honorable _____;
at Secretary of _____. Begin: Sir;
Mr. _____.

Justice. Address: The Honorable
_____, United States Supreme
or Mr. Justice _____, The Supreme
Begin: Mr. Justice; or Dear Justice.

Address: The Right Honourable Lord
_____, or The Lord _____. Begin: My

Baroness. Address: The Right Honourable the
Baroness _____; or The Lady _____.
Begin: Madam.

Baronet. Address: Sir John _____, Bt. or
Bart. Begin: Sir.

Baronet's wife. See *Lady*, below.

Baron's wife. See *Baroness*, above.

Bishop (Anglican). Address: The Right Rev-
erend the Lord Bishop of _____; or The
Lord Bishop of _____. Begin: My Lord
Bishop; or My Lord.

Bishop (Methodist). Address: Reverend Bishop
_____. Begin: Dear Sir; or My
dear Bishop _____.

Bishop (Protestant Episcopal). Address: To the
Right Reverend _____, Bishop of
_____. Begin: Right Reverend and Dear
Sir; or Dear Bishop _____.

Bishop (Roman Catholic). Address: The Most
Reverend _____, Bishop of
_____. Begin: Your Excellency; or Most
Reverend Sir.

Cabinet Officers (U. S.). Address: The Honor-
able the Secretary of State (or Labor, etc.);
The Secretary of State, etc. Begin: Sir; or
My dear Mr. Secretary.

Canon. Address: The Very Reverend Canon
_____; or The Very Reverend
_____, Canon of _____. Begin: Very Rever-
end Canon; or Dear Canon _____.

Cardinal. Address: His Eminence John, Car-
dinal _____. Begin: Your Eminence.

Cardinal (if also an Archbishop). Address: His
Eminence _____, Cardinal _____, Arch-
bishop of _____. Begin: Your Eminence.

Chargé d'Affaires. Address: The Chargé d'Af-
faires of _____; or _____, Esq.,
Chargé d'Affaires. Begin: Dear Sir; or My
dear Mr. _____.

Chief Justice of the U. S. Address: The Chief
Justice of the U. S.; or The Chief Justice,
The Supreme Court, Washington, D. C.
Begin: My dear Mr. Chief Justice; or Sir.

Governor. Address: (In Mass. and by court
in some other states) His Excellency,
Governor of _____; or His Excellence
_____, or (in other states of
U. S.) The Honorable the Governor
_____; or Hon. _____, Gover-
nor of _____. Begin: Sir; or Dear Sir.

Governor-General of Canada. Address: His
Excellency The Right Honourable _____
, (plus rank or title, if any). Be-
gin: My Lord; or Sir.

Governor-General's wife. Address: Her Ex-
cellency _____, Begin: Madam.

Judge (U.S.A.). Address: The Honor-
able _____, U. S. District Judge
Begin: Dear Sir; or My dear Judge _____

King. Address: The King's Most Excel-
lent Majesty; or His Most Gracious Ma-
jesty King _____. Begin: Sir; or May it please
your Majesty.

King's Counsel. Address: To _____
Esq., K.C. Begin: Sir.

Knight. Address: Sir John _____ (initial
his order, if any, as K.C.B.). Begin: Sir.

Knight's wife. See Lady, below.

Lady. Address: Lady _____, or (if daugh-
ter of a baron or viscount) Hon. Lady _____
or (if the daughter of an earl, marquess
duke) Lady Florence _____. Begin:
Madam; or Your Ladyship.

Lawyer. Address: _____, Esq.
Mr. _____, Attorney at Law
Begin: Dear Sir; or My dear Mr. _____

Lieutenant Governor. Address: The Honor-
able _____, Lt. Governor of _____. Be-
gin: Sir; or Dear Sir.

Maid of Honor. Address: The Honourable _____
Begin: Madam.

Marchioness. Address: The Most Honour-
able the Marchioness of _____. Begin: Ma-
dam.

Marquis. Address: The Most Honourable
The Marquis of _____; or The Marquis
_____. Begin: My Lord Marquis.

Mayor (in Canadian cities and towns, and
English boroughs). Address: The Right Wor-
shipful the Mayor of _____ (English);
Worship, The Mayor of _____ (Canadian)
Begin: Sir.

Mayor (in the U. S.). Address: The Honor-
able _____, Mayor of _____
The Mayor of the City of _____. Be-
gin: Sir; or Dear Mr. Mayor.

Member of Parliament (or of a Provincial L-
egislative Council or Legislature, etc.) To
the ordinary form of address add M.P.
M.P.P.; or M.L.A., etc.). Begin: Sir.

Minister (Diplomatic). Address: The Honor-
able _____, Minister of _____
Begin: Sir; or My dear Mr. Minister.

Minister (Religious). See Clergyman, above.

Moderator (Presbyterian Church). Address:
Right Reverend _____. Begin: Right Re-
verend Sir.

Monsignor. Address: The Right Reverend
Monsignor _____. Begin: Right Re-
verend and dear Monsignor.

Superior of a Sisterhood. Address: The
end Mother Superior, Convent of
or Reverend Mother _____, O.S.D.
ther initials of the order). Begin:
end Mother; or Dear Madam.

Officers. Address: The Admiral of the
of the U. S.; or Captain _____
U.S.N. Begin: Sir; or Dear Com-
ander _____; but for officers below the
of commander, Dear Mr. _____.

Sister of a Religious Order, listed

uncio or Internuncio or Apostolic Dele-
Address: His Excellency, The Papal
S (or Internuncio or Apostolic Dele-
to _____. Begin: Your Excellency.

(Eastern Church). Address: His Be-
the Patriarch of _____.; or His
ude the Lord _____. Patriarch of
Begin: Most Reverend Lord; or
Beatitude.

Address: To His Holiness Pope _____.
Most Holy Father; or Your Holiness.

of a College or University. Address:
_____, LL.D. (or if he is
LL.D., use the initials of his highest
), President of _____ University;
ident, _____ University. If he is a
nan, address as Reverend _____
LL.D., President of _____ Uni-
Begin: Dear Sir; or Dear President

of a Theological Seminary. Address:
ev. President _____. Begin:
ir; or Dear President _____.

of State Senate. Address: The Hon-
_____, President of the
of _____. Begin: Sir.

of the Senate of the U. S. Address:
norable, The President of the Senate
U. S.; or The Honorable _____
President of the Senate. Begin:

of the U. S. Address: The President,
hite House. Begin: Mr. President;
President; or My dear Mr. President.

man Catholic Church). Address: Rev-
_____, O.S.M. (or other
of his order). Begin: Dear Father
(religious name).

ister of Canada. Address: The Right
able _____, P.C., Prime Minister
ada. Begin: Sir.

the Blood Royal. Address: His Royal
ss Prince _____. Begin: Sir.

Wales. Address: His Royal Highness
nce of Wales. Begin: Sir; or May it
our Royal Highness.

of the Blood Royal. Address: Her Royal
ss the Princess _____ (Christian
Begin: Madam.

ncillor (British Imperial). Address:
Right Honourable _____
gin: Sir. Note.—If other titles are
they should come after *The Right*
ble; as, *The Right Honourable Sir*
_____.

Privy Councillor (of Canada). Address: The
Honourable _____. Begin: Sir.

Professor in a College or University. Address:
Professor _____; or _____
_____, Ph.D. (or LL.D., M.D., etc., using
only the initials of his highest degree, if
the degrees are in the same field), Professor
of _____. Begin: Dear Sir; or My dear
Professor.

Professor in a Theological Seminary. Address:
The Reverend Professor _____.
or The Rev. _____, D.D. Begin:
Dear Sir; or Dear Professor _____.

Queen. Address: The Queen's Most Excellent
Majesty; or Her Gracious Majesty, The
Queen. Begin: Madam; or May it please
your Majesty.

Queen Mother. Address: Her Gracious Majesty
Queen _____. Begin: Madam; or May it
please your Majesty.

Rabbi. Address: Rabbi _____.; or
The Rev. _____. Begin: Reverend
Sir; or My dear Rabbi _____. (If he holds
a doctor's degree, Dr. may be substituted
for Rabbi.)

Rector of a Religious House or of a Seminary.
Address: The Very Reverend _____
_____, O.S.B. (or other initials of order),
Rector, Brothers of St. Francis. Begin:
Very Reverend and dear Father (or
Brother).

Representative. See *Congressman*, above.

Senator (U. S.) Address: The Honorable
_____, the U. S. Senate, Washing-
ton, D. C. Begin: Dear Sir; or My dear
Senator.

Sister of a Religious Order. Address: Sister
_____, (followed by the initials of the
order). Begin: Dear Sister; or My dear
Sister _____.

Speaker of the House of Commons (Canada).
Address: The Honourable _____
The Speaker of the House of Commons.
Begin: Dear Mr. Speaker.

**Speaker of the House of Representatives of the
U. S.** Address: The Honorable _____
_____, Speaker of the House of Repre-
sentatives. Begin: Sir; or My dear Mr.
Speaker.

State Senator. Like Senator (U. S.).

Undersecretary of State (U.S.A.). Address: The
Undersecretary of State; or The Honorable
_____, Undersecretary of State.
Begin: Sir; or Dear Mr. _____.

Vice-President. Address: The Vice-President; or
The Honorable _____, Vice-Presi-
dent of the U. S. Begin: Mr. Vice-President;
or Sir.

Viscount. Address: The Right Honourable the
Viscount _____.; or The Viscount _____.
Begin: My Lord.

Viscountess. Address: The Right Honourable
the Viscountess _____.; or The Viscount-
ess _____. Begin: Madam.

Widow. Address: Ordinarily address by her
former title; as, Mrs. John Smith, not
Mrs. Mary Alice Smith, unless the latter
form is preferred by the person herself.

GEOGRAPHY

Miscellaneous Data for the United States

Source: U. S. Geological Survey.

Highest point: Mount McKinley, Alaska	20,320
Lowest point: Death Valley, Calif.	282 ft. below sea level
Most northern point: Point Barrow, Alaska	71° 23' N.
Most southern point: KaLaie, on island of Hawaii	18° 56' N.
Most eastern point: West Quoddy Head, Maine	66° 57' W.
Most western point: Kure Island, Hawaii	178° 22' E.
Places farthest apart: Kure Island, Hawaii and Mangrove Point, Florida	5,848 mi.
Geographic center: In Butte County, South Dakota*	44° 58' N. 103° 46' W.
Boundaries: Between Alaska and Canada	1,538 mi.
Between the 48 contiguous states and Canada (including Great Lakes)	3,987 mi.
Between the United States and Mexico	2,013 mi.

* West of Castle Rock.

Mountain Peaks in the U. S. 14,000 Feet or More Above Sea Level

Source: U. S. Geological Survey.

Name of summit	State	Height, ft.	Name of summit	State	Height, ft.	Name of summit	State	Height, ft.
McKinley	Alaska	20,320	Castle	Colo.	14,259	Eolus (Aeolus)	Colo.	14,259
North Peak	Alaska	19,370	Longs	Colo.	14,255	Russell	Calif.	14,255
*St. Elias	Alaska	18,008	Quandary	Colo.	14,252	Snowmass	Colo.	14,252
Foraker	Alaska	17,395	Wilson	Colo.	14,246	Columbia	Colo.	14,246
Blackburn	Alaska	16,523	White	Calif.	14,246	*Augusta	Alaska	14,246
Bona	Alaska	16,421	North Palisade	Calif.	14,242	Culebra	Colo.	14,242
Sanford	Alaska	16,208	Cameron	Colo.	14,238	Missouri	Colo.	14,238
*Vancouver	Alaska	15,700	Shavano	Colo.	14,229	Sunlight	Colo.	14,229
*Fairweather	Alaska	15,300	Princeton	Colo.	14,197	Split	Calif.	14,197
*Hubbard	Alaska	14,950	Belford	Colo.	14,197	Red Cloud	Colo.	14,197
Bear	Alaska	14,850	Yale	Colo.	14,196	Handies	Colo.	14,196
Hunter	Alaska	14,580	Creston Needle	Colo.	14,191	Bierstadt	Colo.	14,191
Brown Tower	Alaska	14,530	Bross	Colo.	14,169	Humboldt	Colo.	14,169
*Alverstone	Alaska	14,500	Sill	Calif.	14,162	Middle Palisade	Calif.	14,162
Whitney	Calif.	14,495	Shasta	Calif.	14,162	Little Bear	Colo.	14,162
Elbert	Colo.	14,431	El Diente	Colo.	14,159	Sherman	Colo.	14,159
Harvard	Colo.	14,420	Maroon	Colo.	14,158	Stewart	Colo.	14,158
Massive	Colo.	14,418	Tabeguache	Colo.	14,155	Langley	Calif.	14,155
Rainier	Wash.	14,410	Oxford	Colo.	14,153	Tyndall	Calif.	14,153
Williamson	Calif.	14,375	Point Success	Wash.	14,150	Sunshine	Colo.	14,150
La Plata	Colo.	14,340	Sneffels	Colo.	14,150	Wetterhorn	Colo.	14,150
Blanca	Colo.	14,317	Democrat	Colo.	14,142	Wilson	Colo.	14,142
Uncompahgre	Colo.	14,301	Capitol	Colo.	14,137	Muir	Calif.	14,142
Crestone	Colo.	14,291	Liberty Cap	Wash.	14,133	San Luis	Colo.	14,133
Lincoln	Colo.	14,284	Lindsey	Colo.	14,125	Wrangell	Alaska	14,125
Grays	Colo.	14,274	Pikes Peak	Colo.	14,110	Huron	Colo.	14,125
Antero	Colo.	14,269	Kit Carson	Colo.	14,100	Pyramid	Colo.	14,110
Torreys	Colo.	14,264	Windom	Colo.	14,091	Grizzly	Colo.	14,100
Evans	Colo.	14,260				North Maroon	Colo.	14,091

* Mountains whose summits are on the international boundary between Canada and Alaska.

The Continental Divide

The Continental Divide is a ridge of high ground which runs irregularly north and south through the Rocky Mountains and separates eastward-flowing from westward-

flowing streams. The waters which flow eastward empty into the Atlantic Ocean, chiefly by way of the Gulf of Mexico; those which flow westward empty into the Pacific.

Highest, Lowest, and Average Altitudes in the United States

Source: U. S. Geological Survey.

	Average elevation, ft.	Highest point	Elevation, ft.	Lowest point	Elevation, ft.
	500	Cheaha Mountain.....	2,407	Gulf of Mexico.....	Sea level
	1,900	Mount McKinley.....	20,320	Pacific Ocean ¹	Sea level
	4,100	Humphreys Peak.....	12,670	Colorado River.....	100
	650	Magazine Mountain.....	2,823	Ouachita River.....	55
	2,900	Mount Whitney.....	14,495	Death Valley.....	282*
	6,800	Mount Elbert.....	14,431	Arkansas River.....	3,350
	500	Mt. Frissell.....	2,380	Long Island Sound.....	Sea level
	60	Ebright Road.....	442	Atlantic Ocean.....	Sea level
	150	Tenleytown.....	410	Potomac River.....	Sea level
	100	Sec. 30, T6N, R20W ¹	345	Atlantic Ocean.....	Sea level
	600	Brasstown Bald.....	4,784	Atlantic Ocean.....	Sea level
	1,990	Mauna Kea.....	13,796	Pacific Ocean.....	Sea level
	5,000	Borah Peak.....	12,062	Snake River.....	720
	600	Charles Mound.....	1,241	Mississippi River.....	279
	700	Franklin Township.....	1,253	Ohio River.....	320
	1,100	T100N., R.44W ²	1,675	Mississippi River.....	480
	2,000	In T15S R43W ³	4,135	Verdigris River.....	700
	750	Black Mountain.....	4,145	Mississippi River.....	257
	100	Driskill Mountain.....	535	New Orleans.....	5*
	600	Mount Katahdin.....	5,268	Atlantic Ocean.....	Sea level
	350	Backbone Mountain.....	3,360	Atlantic Ocean.....	Sea level
ts.....	500	Mount Greylock.....	3,491	Atlantic Ocean.....	Sea level
	900	Sec. 2, T50N., R31W ⁴	1,980	Lake Erie.....	572
	1,200	Misquah Hills.....	2,230	Lake Superior.....	602
	300	Woodall Mountain.....	806	Gulf of Mexico.....	Sea level
	800	Taum Sauk Mountain.....	1,772	St. Francis River.....	230
	3,400	Granite Peak.....	12,799	Kootenai River.....	1,800
	2,600	Johnson Township.....	5,424	Southeast corner of State.....	840
	5,500	Boundary Peak, White Mountains.....	13,145	Colorado River.....	470
ire.....	1,000	Mount Washington.....	6,288	Atlantic Ocean.....	Sea level
	250	High Point.....	1,803	Atlantic Ocean.....	Sea level
	5,700	Wheeler Peak.....	13,160	Red Bluff Reservoir.....	2,817
	1,000	Mount Marcy.....	5,344	Atlantic Ocean.....	Sea level
na.....	250	Mount Mitchell.....	6,684	Atlantic Ocean.....	Sea level
a.....	1,900	White Butte.....	3,530	Red River.....	750
	850	Campbell Hill.....	1,550	Ohio River.....	433
	1,300	Black Mesa.....	4,978	Red River.....	300
	3,300	Mount Hood.....	11,245	Pacific Ocean.....	Sea level
	500	Mt. Davis, Negro Mountains.....	3,213	Delaware River.....	Sea level
	200	Jerimoth Hill.....	812	Atlantic Ocean.....	Sea level
na.....	350	Sassafras Mountain.....	3,560	Atlantic Ocean.....	Sea level
	2,200	Harney Peak.....	7,242	Big Stone Lake.....	962
	900	Clingmans Dome.....	6,642	Mississippi River.....	182
	1,700	Guadalupe Peak.....	8,751	Gulf of Mexico.....	Sea level
	6,100	Kings Peak.....	13,498	Beaverdam Creek.....	2,000
	1,000	Mount Mansfield.....	4,393	Lake Champlain.....	95
	950	Mount Rogers.....	5,720	Atlantic Ocean.....	Sea level
	1,700	Mount Rainier.....	14,410	Pacific Ocean.....	Sea level
se.....	1,500	Spruce Knob.....	4,860	Potomac River.....	240
	1,050	Rib Mountain.....	1,941	Lake Michigan.....	581
it.....	6,700	Gannett Peak.....	13,785	Belle Fourche River.....	3,100

Sea level. County. ² Osceola County. ³ Wallace County. ⁴ Baraga County.

Forest Resources of the United States

Source: U. S. Forest Service.

1/3 of the U. S. is forest land in-
 over 1,000 different kinds of trees.
 al areas include land capable of
 timber of commercial quantity and
 nd available now or prospectively
 se. Almost all the old-growth forest
 West. Noncommercial areas include
 hidesert, chaparral and other forest
 low timber productivity, though
 it is important for watershed pro-

U. S. Forest Land in Acres, 1953

(Alaska and Hawaii not included)

Old growth	46,055,000
Young-growth saw timber	132,561,000
Pole timber stands	169,408,000
Seedling and sapling stands	94,709,000
Nonstocked and other areas	41,607,000
Total, commercial forest land ..	484,340,000
Noncommercial forest	163,346,000
Total, all forest land	647,686,000

Rivers of the U. S.

Source: U. S. Geological Survey.

(300 or more miles long)

ALABAMA (315 mi.): From junction of Tallapoosa R. and Coosa R. in Alabama to Mobile R.

ALLEGHENY (325 mi.): From Potter Co. in Pennsylvania to junction with Monongahela R. at Pittsburgh to form Ohio R.

ALTAMAHA-OCMULGEE (392 mi.): From junction of Yellow R. and South R., Newton Co. in Ga. to Atlantic Ocean.

APALACHICOLA-CHATTAHOOCHEE (500 mi.): From Towns Co. in Ga. to Gulf of Mexico in Fla.

ARKANSAS (1,450 mi.): From Lake Co. in Colorado to Mississippi R. in Arkansas.

BIG BLACK (330 mi.): From Webster Co. in Mississippi to Mississippi R.

BIG HORN (336 mi.): From junction of Popo Agie R. and Wind R. in Wyoming to Yellowstone R. in Montana.

BRAZOS (870 mi.): From junction of Salt Fork and Double Mountain Fork in Texas to Gulf of Mexico.

CANADIAN (906 mi.): From Golfax Co. in N. Mex. to Arkansas R. in Okla.

CEDAR (329 mi.): From south central Minnesota to Iowa R. in Iowa.

CIMARRON (600 mi.): From Golfax Co. in New Mexico to Arkansas R. in Okla.

CLARK FORK-PEND OREILLE (505 mi.): From Silver Bow Co. in Mont. to Columbia R. in British Columbia.

COLORADO (1,360 mi.): From Grand Co. in Colorado to Gulf of California.

COLORADO (840 mi.): From Dawson Co. in Texas to Matagorda Bay.

COLUMBIA (1,214 mi.): From Columbia Lake in British Columbia to Pacific Ocean (entering between Oreg. and Wash.)

COLVILLE (350 mi.): From Brooks Range in Alaska to Beaufort Sea.

CONNECTICUT (407 mi.): From Connecticut Lakes in New Hampshire to Long Island Sound in Connecticut.

CUMBERLAND (687 mi.): From junction of forks in Harlan Co. in Kentucky to Ohio R.

DELAWARE (326 mi.): From Catskill Mts., N. Y. to Delaware Bay.

DES MOINES (327 mi.): From Humboldt Co. in Iowa to Mississippi R.

GILA (630 mi.): From southwest New Mexico to Colorado R. in Arizona.

GREEN (360 mi.): From Lincoln Co. in Kentucky to Ohio R. in Kentucky.

GREEN (730 mi.): From Sublette Co. in Wyoming to Colorado R. in Utah.

HUDSON (306 mi.): From Essex Co. in New York to Upper New York Bay (entering between New York and New Jersey).

JAMES (sometimes called **DAKOTA**) (710 mi.): From Wells Co. in North Dakota to Missouri R. in South Dakota.

JAMES (340 mi.): From junction of Jackson R. and Cowpasture R. in Virginia to Chesapeake Bay.

KANAWHA-NEW (352 mi.): From junction of North and South Forks of New River in North Carolina to Ohio R.

KOYUKUK (500 mi.): From Brooks Range in Alaska to Yukon R.

KUSKOKWIM (550 mi.): From Alaska Range in Alaska to Kuskokwim Bay.

LITTLE COLORADO (300 mi.): From Apache Co. in Arizona to Colorado R.

LITTLE MISSOURI (560 mi.): From northeast Wyoming to Missouri R. in North Dakota.

MILK (625 mi.): From junction of Milk R. in Alberta Province to Missouri R.

MINNESOTA (332 mi.): From Big Lake between Minnesota and South Dakota to Mississippi R. at St. Paul.

MISSISSIPPI (2,348 mi.): From Itasca in Minn. to mouth of South Bay.

MISSOURI (2,466 mi.): From junction of Jefferson R. and Madison R. in Montana to Mississippi R. near St. Louis.

MOBILE-ALABAMA-COOSA (639 mi.): From junction of Etowah R. and Oostanaula R. in Georgia to Mobile Bay.

NEOSHO (460 mi.): From Morris Co. in Kansas to Arkansas R. in Oklahoma.

NIOBRARA (431 mi.): From Niobrara Co. in Wyoming to Missouri R. in Nebraska.

NOATAK (350 mi.): From Brooks Range in Alaska to Kotzebue Sound.

NORTH CANADIAN (760 mi.): From Union Co. in New Mexico to Canadian River in Oklahoma.

NORTH PLATTE (618 mi.): From Johnson Co. in Colorado to junction of So. Platte R. in Nebraska to form Platte R.

NUECES (338 mi.): From near Edwards Real Co. border in Texas to Nueces Bay.

OHIO (981 mi.): From junction of Allegheny R. and Monongahela R. at Pittsburgh to Mississippi R. between Illinois and Kentucky.

OSAGE (500 mi.): From junction of Elm Creek and Onion Creek in Kansas to Missouri R. in Missouri.

OUACHITA (605 mi.): From Polk Co. in Arkansas to Red R. in Louisiana.

PEARL (490 mi.): From Neshoba Co. in Mississippi to Gulf of Mexico between Mississippi and Louisiana.

PECOS (735 mi.): From Mora Co. in New Mexico to Rio Grande in Texas.

PEE DEE-YADKIN (435 mi.): From Watauga Co. in N. C. to Winyah Bay in S. C.

PLATTE (310 mi.): From junction of North Platte R. and South Platte R. in Nebraska to Missouri R. below Omaha.

UPINE (450 mi.): From Yukon R. in Canada, to Yukon R. in Alaska.

RED RIVER (375 mi.): From junction of Johnson Co. in Wyoming to Red R. in Montana.

RED RIVER (1,018 mi.): From junction of forks in Co. in Oklahoma to Mississippi in Louisiana.

RED RIVER OF THE NORTH (545 mi.): From junction of Tall R. and Bois de Sioux R. in Minnesota to Lake Winnipeg in Manitoba.

RED RIVER (445 mi.): From junction of Fork and Arikaree R. in Nebraska to junction with Smoky Hill R. in Kansas.

RED RIVER (1,885 mi.): From San Juan Co. in Colorado to Gulf of Mexico.

RED RIVER (380 mi.): From junction of Montgomery Co. in Virginia to Chesapeake Sound in North Carolina.

RED RIVER (300 mi.): From Washington Co. in Minnesota to Mississippi R. in Illinois.

RED RIVER (380 mi.): From junction of Hunt Co. in Texas to Sabine Lake in Texas and Louisiana.

RED RIVER (382 mi.): From Siskiyou Co. in California to Suisun Bay.

RED RIVER (425 mi.): From Iron Co. in Missouri to Mississippi R. in Ark.

RED RIVER (420 mi.): From Custer Co. in South Dakota to Snake R.

RED RIVER (350 mi.): From junction of Madera Co. in California to San Francisco Bay.

RED RIVER (360 mi.): From Archuleta Co. in Colorado to Colorado R. in Utah.

RED RIVER (538 mi.): From McDowell Co. in N. C. to Ocean in S. C.

RED RIVER (314 mi.): From junction of Seneca R. and Seneca R. in South Carolina to Atlantic Ocean between Georgia and South Carolina.

RED RIVER (540 mi.): From Cheyenne Co. in Colorado to junction with Republican R. in Kansas to form Kansas R.

RED RIVER (1,038 mi.): From Ocean Plateau to Columbia R. in Wash.

RED RIVER (424 mi.): From Park Co. in Colorado to junction with North Platte R. in Nebraska to form Platte R.

RED RIVER (444 mi.): From Otsego Co. in New York to Chesapeake Bay in Maryland.

RED RIVER (301 mi.): From Tippah Co. in Mississippi to junction with Yazoo R. to form Yazoo R.

RED RIVER (800 mi.): From Wrangell Mts. in Alaska to Yukon R. in Yukon Territory, Canada, to Yukon R.

RED RIVER (652 mi.): From junction of French Broad R. and French Broad R. near Ohio R. in Kentucky.

RED RIVER (409 mi.): From junction of Amory, Mississippi, to Alabama.

TRINITY (360): From junction of forks in Kaufman Co. in Texas to Galveston Bay.

WABASH (475 mi.): From Darke Co. in Ohio to Ohio R. between Ill. and Ind.

WASHITA (500 mi.): From Hemphill Co. in Texas to Red R. in Oklahoma.

WHITE (690 mi.): From Madison Co. in Arkansas to Mississippi R.

WISCONSIN (430 mi.): From Vilas Co. in Wisconsin to Mississippi R.

YELLOWSTONE (671 mi.): From Park Co. in Wyoming to Missouri R. in N. Dak.

YUKON (1,800 mi.): From junction of Lewes R. and Pelly R. in Yukon Territory, Canada, to Bering Sea in Alaska.

Coastline of the United States

Source: U. S. Coast and Geodetic Survey.

State	Lengths in statute miles		
	General coastline*	Tidal shoreline, general†	Tidal shoreline, detailed‡
Maine.....	228	676	3,478
New Hampshire.....	13	14	131
Massachusetts.....	192	453	1,519
Rhode Island.....	40	156	384
Connecticut.....	...	96	618
New York.....	127	470	1,850
New Jersey.....	130	398	1,792
Pennsylvania.....	...	...	89
Delaware.....	28	79	381
Maryland.....	31	452	3,190
Virginia.....	112	567	3,315
North Carolina.....	301	1,030	3,375
South Carolina.....	187	758	2,876
Georgia.....	100	603	2,344
Florida (Atlantic).....	399	618	3,035
Total Atlantic coast.....	1,888	6,370	28,377
Florida (Gulf).....	798	1,658	5,391
Alabama.....	53	199	607
Mississippi.....	44	155	359
Louisiana.....	397	985	7,721
Texas.....	367	1,100	3,359
Total Gulf coast.....	1,659	4,097	17,437
California.....	840	1,190	3,427
Oregon.....	296	312	1,410
Washington.....	157	908	3,026
Total Pacific coast.....	1,293	2,410	7,863
Alaska.....	6,640	15,132	33,904
Hawaii.....	775	900	1,092
Total U. S.....	12,255	28,909	88,673

* Figures are lengths of general outline of sea-coast. Measurements made with unit measure of 30 minutes of latitude on charts as near scale of 1:1,200,000 as possible. Shoreline of bays and sounds is included to point where they narrow to width of unit measure, and distance across at such point is included. † Measurements made with unit measure of 3 statute miles on charts of 1:200,000 and 1:400,000 scale when available. Shoreline of bays, sounds and other bodies of water included to point where they narrow to width of 3 statute miles, and distance across at such point is included. ‡ Figures obtained in 1939-40 with recording measure on largest scale maps and charts then available. Shoreline of bays, sounds and other bodies of water included to head of tide-water, or to point where they narrow to width of 100 feet.

WEATHER AND CLIMATE

Devastating North Atlantic Hurricanes of the 20th Century

The following is a selected list of North Atlantic hurricanes based on casualties, damage and general public interest. Facts about each storm are taken from Weather Bureau records, although in some cases only estimated wind speed are available. Data given in this list pertain only to U. S. land areas except where indicated otherwise.

Date	Areas hardest hit	Land stations with highest wind speed	Deaths (U. S. only)	Est. damage (millions)	Remarks
1900, Sept. 8.....	Galveston, Tex.	Galveston, Tex. (120* mph)	6,000	\$ 20	Damage due to both wind and storm wave. Galveston inundated.
1909, Sept. 10-12....	La.; Miss.	New Orleans, La. (68 mph)	350	5	Winds 50-75 mi. W of New Orleans, where deaths were much stronger than elsewhere.
1915, Aug. 5-24.....	East Tex.; La.	Galveston, Tex. (120 mph)	275	50	Water 5-6 ft. deep in Galveston business district. 90% homes demolished. War issued well ahead of time.
1915, Sept. 22-Oct. 2..	Mid-Gulf Coast	Burrwood, La. (140 mph)	275	13	Many casualties due to people insisting on staying in low-lying areas despite warnings.
1919, Sept. 2-14.....	Fla.; La.; Tex.	Sand Key, Fla. (84† mph)	284	22	488 persons drowned at sea.
1926, Sept. 6-22.....	Fla.; Ala.	Miami Beach, Fla. (132 mph)	100	105	Most deaths were in Miami. Said to have been one of the most destructive storms of century.
1928, Sept. 6-20.....	Southern Fla.	Lake Okeechobee, Fla. (75† mph)	1,836	25	1,870 injured. Nearly all deaths were in Lake Okeechobee. Winds estimated as high as 160 mph caused Lake to flow into populated areas.
1935, Aug. 31-Sept. 8..	Southern Fla.	Tampa, Fla. (75 mph)	376	6	Sustained winds over Florida Keys est. 150-200 mph. Remembered as "Labor Day Storm," one of most violent on record.
1935, Oct. 30-Nov. 8...	Southern Fla.	Miami, Fla. (75 mph)	5	6	Called "The Yankee Storm" because it moved in from N. was of small diameter and wind covered only narrow band.
1938, Sept. 16-22.....	Long Island, N. Y. Southern New Eng.	Blue Hills Obs., Mass. (186 mph)	600	250	Unusually destructive. Storm center moved as fast as 56 mi. at times. 1,754 injured. Damage est. as high as \$330 million.
1940, Aug. 5-15.....	Ga.; S. C.; N. C.	Savannah, Ga. (73 mph)	50	3	30 of deaths were due to disastrous flooding inland as well as west as Tennessee.
1944, Sept. 8-16.....	N. C. to New England	Cape Henry, Va. (134 mph)	46	100	344 deaths at sea. Shipping vessels were crowded with war activity.
1944, Oct. 13-21.....	Fla. to Carolinas	Dry Tortugas Is. (120 mph)	18	100	About 300 were killed in low-lying area before storm reached U. S. Evacuation of thousands from threatened areas in advance prevented higher toll.
1945, Aug. 24-29.....	Texas	Seadrift, Tex. (135 mph)	3	20	Several other coastal localities recorded 135 mph. One of the most intense hurricanes in Texas.
1945, Sept. 11-19.....	Fla.; Ga.; S. C.	Carysfort Reef Light, Fla. (138 mph)	4	60	22 casualties in Bahamas. Damage mostly in Dade Co. Evacuation of 50,000 persons prevented heavier loss of life.

Date	Areas hardest hit	Land stations with highest wind speed	Deaths (U. S. only)	Est. damage (millions)	Remarks
10-19.....	Fla.; Mid-Gulf Coast	Hillsboro Light, Fla. (155 mph)	51	110	Damage especially heavy along Gulf Coast. Onshore winds resulted in high water.
23-29.....	Fla. to Carolinas	Jupiter, Fla. (153 mph)	2	52	Center of storm crossed Lake Okeechobee. Levees held back water, which rose 12 ft. (Compare casualties with 1928.)
15-19.....	Florida	Miami, Fla. (122 mph)	4	28	"KING"—small but violent storm. Struck Miami, then moved up Florida peninsula.
26-31.....	N. C. to Maine	Block Island, R. I. (135 mph)	60	461	"CAROL"—more damage than any other single storm on record for U. S. Water and high waves flooded low-lying areas 1,000 injuries in Long Island-New England area.
6-11.....	N. J. to Maine	Blue Hill Obs., Mass. (101 mph)	21	43	"EDNA"—wind est. up to 135 mph at Massachusetts Bay.
-16.....	S. C. to N. Y.	(See Remarks)	95	252	"HAZEL"—several N. C. localities had winds of 130-150 mph with unusually heavy wave damage resulting. Est. 400-1,000 casualties in Haiti. In Canada there were 78 deaths, mostly due to flooding.
1-13.....	N. C. to Pa. and N. Y.	Ft. Macon, N. C. (100 mph)	25	46	"CONNIE"—center passed over Morehead City and Beaufort flooding these cities. 12.35 in. of rain in New York City.
7-19.....	N. C. to New England	Wilmington, N. C. (74 mph)	184	832	"DIANE"—worst floods in history in Southern New England. 16 in. of rain in Hartford area.
19-20.....	North Carolina	Beaufort, N. C. (120* mph)	7	88	"IONE"—center passed over Morehead City and Beaufort but lost force rapidly thereafter. Recurved to sea south of Norfolk.
24-26.....	Northwest Florida	Burrwood, La. (84 mph)	15	25	"FLOSSY"—center passed in northeasterly direction over Burrwood, La., at 4 a.m. and over Pensacola, Fla., at 3 p.m. on Sept. 24. Lost force rapidly thereafter, but dumped heavy rains in southeastern states.
6-28.....	Southwest Texas and Southwest Louisiana	Lake Charles, La. (97 mph)	390	150	"AUDREY"—gave an early start to the hurricane season and wiped out Cameron, La. Two weeks later "BERTHA," a less destructive tropical storm, struck in exactly the same area.

ed. † Wind-measuring equipment disabled at speed indicated. NOTE: Additional hurricanes may be as Chronology of 1960.

Tropical Storms and Hurricanes, 1886-1959

	Jan.-Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
tropical storms.....	2	10	39	41	134	196	140	26	4	592
tropical storms that reached intensity.....	1	2	17	23	99	126	65	11	2	346

Groups of Tornadoes That Caused Outstanding Damage

Source: Data for 1884-1953, reprinted from *Tornadoes of the United States* by S. D. Flora. Copyright, 1954, by University of Oklahoma Press. Used by permission.

Date	Tornadoes in group	Deaths	Property losses	States in which storms occurred
1884, Feb. 19.....	60	800	*	Mississippi, Alabama, North and South Carolina, Tennessee, Kentucky, Indiana
1917, May 26-27.....	*	249	\$ 5,555,000	Illinois, Indiana, Arkansas, Kentucky, Tennessee, Alabama, Mississippi
1920, Apr. 20.....	6	220	3,525,000	Mississippi, Alabama, Tennessee
1924, Apr. 29-30.....	22	115	4,372,300	Oklahoma, Arkansas, Alabama, Georgia, Louisiana, North Carolina, Virginia
1924, June 28.....	4	96	13,050,000	Ohio and Pennsylvania
1925, Mar. 18.....	8	792	17,872,000	Missouri, Illinois, Indiana, Kentucky, Tennessee, Alabama
1927, May 8-9.....	36	227	7,877,000	Texas, Louisiana, Missouri, Nebraska, Indiana, Michigan
1932, Mar. 21.....	27	321	5,514,000	Alabama, Mississippi, Georgia, Tennessee
1936, Apr. 5-6.....	22	498	21,800,000	Arkansas, Alabama, Tennessee, Georgia, South Carolina
1944, June 23.....	4	153	5,160,000	Pennsylvania, West Virginia, Maryland
1947, Apr. 9-10.....	8	167	10,030,750	Texas, Oklahoma, Kansas
1952, Mar. 21-22.....	31	343	15,327,100	Arkansas, Tennessee, Missouri, Mississippi, Alabama, Kentucky
1953, June 7-9.....	12	234	93,230,840	Michigan, Ohio, and New England states.
1954, Mar. 13.....	4	8	9,000,000	Georgia. Heavy damage at Lawson Air Base and Ft. Benning
1955, May 25.....	13	102	11,747,500	Oklahoma and Kansas. Completely destroyed Udall, Kansas, part of Blackwell, Okla.
1956, Apr. 2-3.....	(†)	39	17,000,000	Oklahoma, Kansas, Tennessee, Michigan, Wisconsin
1956, Apr. 15.....	(†)	25	1,500,000	Alabama
1957, Apr. 2.....	(†)	17	2,000,000	Texas and Oklahoma
1957, May 15.....	(†)	21	500,000	Texas
1957, May 20-21.....	(†)	48	15,000,000	Missouri
1957, Dec. 18.....	(†)	16	8,000,000	Illinois, Missouri
1959, Feb. 10.....	(†)	21	12,000,000	St. Louis, Missouri

* Not definitely known; believed to be large. † No information available.

NOTE: Additional storms may be listed in *News Chronology of 1960*.

CLIMATE OF SELECTED U. S. CITIES

Source: U. S. Weather Bureau.

Asterisk (*) indicates less than one-half; T—indicates trace; n.a.—indicates not available.

Month	Temperature				Precipitation			Percentage possible sunshine	Percent relative humidity at noon
	Average maximum	Average minimum	Absolute maximum	Absolute minimum	Amount	Snowfall, inches	Days with precipitation		
BAKERSFIELD, CALIFORNIA (KERN COUNTY AIRPORT) Lat 35° 25' N, Long 119° 03' W									
January.....	57	37	82	14	1.02	T	6	n.a.	72
April.....	76	50	100	30	0.75	0.0	5	n.a.	46
July.....	101	67	118	46	0.01	0.0	*	n.a.	36
October.....	81	52	104	31	0.37	0.0	2	n.a.	42
Annual.....	79	51	118	13	6.36	T	38	n.a.	47
CARIBOU, MAINE (MUNICIPAL AIRPORT) Lat 46° 52' N, Long 68° 01' W									
January.....	18	-1	51	-32	2.24	21.5	14	n.a.	69
April.....	43	26	80	2	2.63	6.1	14	n.a.	59
July.....	75	54	95	40	4.03	0.0	14	n.a.	58
October.....	51	33	79	14	3.47	2.0	12	n.a.	61
Annual.....	47	28	96	-41	35.88	104.3	161	n.a.	62
CHICAGO, ILLINOIS (MIDWAY AIRPORT) Lat 41° 47' N, Long 87° 45' W									
January.....	33	17	67	-20	1.84	7.7	10	43	70
April.....	58	39	91	17	2.82	0.5	13	53	53
July.....	85	64	105	49	2.73	0.0	9	70	51
October.....	64	44	91	14	2.56	0.3	7	64	52
Annual.....	59	41	105	-23	32.72	34.8	118	59	58

	Temperature				Precipitation			Percentage possible sunshine	Percentage relative humidity at noon
	Average maximum	Average minimum	Absolute maximum	Absolute minimum	Amount	Snowfall, inches	Days with precipitation		

TEXAS (LOVE FIELD) Lat 32° 51' N, Long 96° 51' W

.....	55	36	88	-3	2.47	1.1	7	47	62
.....	77	56	96	30	3.87	0.0	9	58	56
.....	95	76	111	56	1.97	0.0	5	78	50
.....	80	58	100	26	2.67	0.0	6	66	51
.....	77	56	111	-3	34.42	1.7	81	67	54

COLORADO (STAPLETON AIRFIELD) Lat 39° 46' N, Long 104° 53' W

.....	42	16	76	-29	0.50	8.8	6	69	44
.....	61	34	86	4	2.05	10.3	9	62	40
.....	87	58	104	42	1.36	0.0	9	70	32
.....	66	37	90	-2	1.01	3.0	6	72	34
.....	64	36	105	-30	14.20	58.7	87	69	38

MINNESOTA (WILLIAMSON-JOHNSON AIRPORT) Lat 46° 50' N, Long 92° 11' W

.....	17	-1	52	-35	1.23	16.1	11	52	73
.....	46	28	88	-5	2.50	6.9	10	56	59
.....	77	56	97	40	3.64	0.0	11	68	61
.....	53	35	86	9	2.22	1.3	9	52	62
.....	47	29	97	-35	29.72	77.2	134	56	65

S, MONTANA (MUNICIPAL AIRPORT) Lat 47° 29' N, Long 111° 21' W

.....	32	14	62	-33	0.55	8.5	8	53	62
.....	56	33	87	-6	0.95	3.8	8	65	45
.....	84	55	102	42	1.35	T	8	80	37
.....	59	37	91	7	0.72	2.9	6	61	48
.....	56	34	105	-35	14.03	55.3	98	64	50

Y, MISSOURI (MUNICIPAL AIRPORT) Lat 39° 07' N, Long 94° 35' W

.....	39	21	75	-20	1.43	5.3	7	50	64
.....	66	46	95	16	3.61	0.6	11	58	51
.....	91	71	112	53	2.83	0.0	8	76	49
.....	70	49	98	17	2.93	T	7	69	48
.....	66	46	113	-22	35.31	18.1	100	62	55

S, CALIFORNIA (CITY OFFICE) Lat 34° 03' N, Long 118° 14' W

.....	65	45	90	28	2.38	T	6	71	46
.....	71	52	100	36	1.17	0.0	4	66	51
.....	83	62	109	49	T	0.0	*	81	49
.....	77	56	104	40	0.50	0.0	2	74	47
.....	74	54	110	28	14.54	T	37	74	47

IDA (INTERNATIONAL AIRPORT) Lat 25° 48' N, Long 80° 16' W

.....	78	59	87	28	2.06	0.0	6	n.a.	55
.....	85	65	93	39	3.99	0.0	7	n.a.	56
.....	91	74	100	68	6.73	0.0	17	n.a.	65
.....	86	70	94	51	8.23	0.0	15	n.a.	64
.....	85	67	100	28	56.41	0.0	128	n.a.	60

H, FLORIDA Lat 25° 47' N, Long 80° 08' W

.....	76	64	84	35	2.04	0.0	7	n.a.	n.a.
.....	81	70	90	48	2.61	0.0	7	n.a.	n.a.
.....	88	77	98	69	3.83	0.0	15	n.a.	n.a.
.....	84	74	92	55	7.07	0.0	15	n.a.	n.a.
.....	82	71	88	35	42.90	0.0	127	n.a.	n.a.

Month	Temperature				Precipitation			Percentage possible sunshine	Percent relative humidity at noon
	Average maximum	Average minimum	Absolute maximum	Absolute minimum	Amount	Snowfall, inches	Days with precipitation		

NASHVILLE, TENNESSEE (BERRY FIELD) Lat 36° 07' N, Long 86° 41' W

January	49	31	78	-15	4.93	3.2	12	37	61
April	70	47	90	25	3.69	0.1	11	59	54
July	91	69	107	51	3.96	0.0	10	63	58
October	74	50	94	26	2.52	0.0	7	63	50
Annual	71	50	107	-15	45.03	8.6	120	56	58

NEW ORLEANS, LOUISIANA (CITY OFFICE) Lat 29° 57' N, Long 90° 04' W

January	64	48	83	15	4.78	T	10	49	61
April	78	62	91	38	5.45	0.0	7	65	54
July	90	76	102	66	7.09	0.0	15	61	63
October	80	65	94	40	3.66	0.0	7	72	51
Annual	78	63	102	7	63.54	0.1	119	61	61

NEW YORK, NEW YORK (BATTERY PLACE) Lat 40° 42' N, Long 74° 01' W

January	40	26	71	-6	3.46	7.4	12	52	61
April	58	42	91	12	3.22	1.0	11	60	54
July	82	67	102	54	4.24	0.0	11	65	58
October	65	50	90	27	3.04	T	9	63	55
Annual	61	46	102	-14	42.03	30.0	124	60	58

PHOENIX, ARIZONA (SKY HARBOR AIRPORT) Lat 33° 26' N, Long 112° 01' W

January	65	35	85	16	0.60	T	4	76	47
April	84	50	104	32	0.35	T	2	88	29
July	105	75	118	61	0.70	0.0	5	84	31
October	88	54	105	36	0.40	0.0	3	88	32
Annual	86	53	118	16	7.16	T	37	85	38

SALT LAKE CITY, UTAH (MUNICIPAL AIRPORT) Lat 40° 46' N, Long 111° 58' W

January	36	17	60	-22	1.20	13.6	10	48	70
April	63	37	85	14	1.76	3.3	9	68	42
July	92	61	106	41	0.61	0.0	4	82	27
October	67	39	88	18	1.34	0.5	6	73	41
Annual	64	39	106	-30	14.74	51.7	87	69	46

SAN FRANCISCO, CALIFORNIA (CITY OFFICE) Lat 37° 47' N, Long 122° 25' W

January	55	45	78	29	4.03	T	11	54	66
April	62	49	89	40	1.49	0.0	6	69	65
July	64	53	99	47	0.01	0.0	1	64	75
October	68	54	96	43	1.07	0.0	5	69	62
Annual	63	51	101	27	20.51	T	70	65	67

SEATTLE, WASHINGTON (CITY OFFICE) Lat 47° 36' N, Long 122° 20' W

January	45	36	67	3	4.49	5.0	18	27	80
April	59	44	87	30	1.94	T	13	48	63
July	75	56	100	46	0.52	0.0	5	62	62
October	61	48	82	29	3.08	T	14	36	79
Annual	60	46	100	3	31.92	8.6	153	45	72

WASHINGTON, D. C. (CITY OFFICE) Lat 38° 54' N, Long 77° 03' W

January	44	29	80	-14	3.41	5.9	11	46	50
April	65	45	95	15	3.20	0.4	11	57	45
July	87	68	106	52	4.11	0.0	11	64	52
October	69	49	96	26	2.97	0.1	8	61	51
Annual	66	48	106	-15	41.44	19.4	124	58	51

Great Disasters

Earthquakes and Volcanic Eruptions

- Aug. 24, ITALY: eruption of Mt. Vesuvius buried cities of Pompeii and Herculaneum, killing thousands.
- Nov. 1, PORTUGAL: one of the most severe of recorded earthquakes leveled Lisbon and was felt as far away as southern France and North Africa; between 10,000 and 20,000 killed in Lisbon alone.
- Aug. 26-28, NETHERLANDS INDIES: eruption of Krakatoa; violent explosions destroyed two-thirds of island. Tsunami waves occurred as far away as Cape Horn, and possibly England. Estimated 36,000 dead.
- May 8, MARTINIQUE, WEST INDIES: Mt. Pelée erupted and wiped out city of St. Pierre; 40,000 dead.
- April 18, SAN FRANCISCO: earthquake accompanied by fire razed more than 45 sq. mi.; more than 500 dead or missing; property damage about \$100-300 millions.
- Dec. 28, MESSINA, SICILY: about 85,000 killed and city totally destroyed. One of the most disastrous of recorded earthquakes.
- Sept. 1, JAPAN: earthquake destroyed third of Tokyo and most of Yokohama; more than 90,000 killed.
- May 31, INDIA: earthquake at Quetta killed an estimated 50,000.
- 1939 Jan. 24, CHILE: earthquake razed some 50,000 sq. mi.; 30,000 killed.
- 1939 Dec. 27, NORTHERN TURKEY: severe quakes destroyed city of Erzincan; about 100,000 casualties.
- 1949 Aug. 5, ECUADOR: earthquake killed about 6,000 and razed 50 towns.
- 1950 Aug. 15, INDIA: second heaviest earthquake on record affected 30,000 sq. mi. in Assam; 20,000-30,000 believed killed.
- 1951 Jan. 18-21, PAPUA TERRITORY, NEW GUINEA: eruption of Mt. Lamington killed more than 3,000.
- 1954 Sept. 9, ALGERIA: about 1,500 reported dead in Northern Algerian earthquake.
- 1956 June 17, AFGHANISTAN: about 2,000 killed during 10-day series of earthquakes in vicinity of Kabul.
- 1957 July 2, NORTHERN IRAN: 1,564 reported dead in earthquake.
- 1957 July 28, MEXICO: about 60 dead in quakes centering in Mexico City and vicinity of Acapulco.
- 1957 Dec. 13-15, WESTERN IRAN: 1,392 dead in earthquake.
- 1960 Apr. 24, LAR, IRAN: 700 dead in earthquakes.
- 1960 May 21-22, 27-29, CHILE: 5,700 dead, millions homeless in earthquakes.

Floods, Avalanches and Tidal Waves

- WORLD**
- LAND: 100,000 persons reputedly drowned by sea flood in Friesland.
- INA: Rebels destroyed Kalfeng wall; 300,000 drowned.
- INA: hundreds of thousands of persons were lost in Honan province in overflow of Hwang Ho River.
- AN: earthquake and tidal wave Sanriku killed 27,000.
- INA: floods in north; casualties estimated at 10,000,000 homeless, saved or drowned.
- SKA-HAWAII: series of tidal waves Pacific originating off Alaska killed about 150 in Hawaii.
- AN: floods in wake of typhoon killed 2,000 persons on Honshu Is.
- KEY: hundreds of persons were drowned when two rivers in south-Turkey burst their dikes.
- INA: about 1,000 reported dead floods near Foochow.
- INA: floods in eastern and southern China left 1,000,000 homeless killed 500.
- 1951 ALPS: snow avalanches killed more than 200 in Alpine regions of Switzerland, Italy, France and Austria.
- 1951 MANCHURIA: floods killed 1,800; 3,000 missing.
- 1953 NORTHWEST EUROPE: storm followed by floods devastated North Sea coastal areas. Netherlands was hardest hit, with 1,794 dead.
- 1954 IRAN: flash flood reportedly killed 2,000 religious pilgrims.
- 1955 INDIA: floods in Punjab, Patiala and at Delhi killed 1,700.
- 1956 CHINA: floods in three provinces following typhoon killed over 2,000.
- 1960 AGADIR, MOROCCO: 10,000-12,000 dead as earthquake set off tidal wave and fire, destroying most of city.
- UNITED STATES**
- 1889 PENNSYLVANIA: more than 2,000 died in Johnstown flood.
- 1913 OHIO AND INDIANA: floods of Ohio and Indiana rivers took 730 lives.
- 1927 MISSISSIPPI VALLEY: floods inundated 20,000 sq. mi.; 700,000 were left homeless.

- 1937 MISSISSIPPI, ALLEGHENY AND OHIO: Floods in valleys killed hundreds.
 1954 TEXAS-MEXICO BORDER: flood of the

Rio Grande river killed 50 or more.
 1955 NORTHERN CALIF., OREG.: Rains caused \$150,000,000 damage, 74 deaths.

Tornadoes, Typhoons and Hurricanes

(For tornadoes and hurricanes in the U. S., see Pages 476-78.)

WORLD

- 1864 Oct. 5, INDIA: most of Calcutta denuded by cyclone; 70,000 killed.
 1876 Oct. 31, INDIA: cyclone, tidal wave swept 3,000 sq. mi.; 215,000 killed.
 1882 June 6, INDIA: cyclone and tidal wave killed 100,000 in Bombay.
 1906 CHINA: typhoon at Hong Kong killed about 10,000.
 1930 Sept. 3, SANTO DOMINGO (now Ciudad Trujillo): hurricane killed about 2,000 and injured 6,000.
 1934 Sept. 21, JAPAN: hurricane killed more than 4,000 on Honshu.
 1935 Oct. 25, HAITI: hurricane, flood killed 2,000 in Jérémie and Jacmel.

- 1942 Oct. 16, INDIA: cyclone devastated Bengal; about 40,000 lives lost.
 1949 Oct. 27, INDIA: cyclone along eastern coast killed about 1,000.
 1949 Oct. 31-Nov. 2, PHILIPPINES: 2 believed dead following typhoon.
 1952 Oct. 20-22, INDO-CHINA, PHILIPPINES: typhoons killed more than 1,000.
 1953 Sept. 25, VIET-NAM: typhoon killed about 1,000 dead.
 1954 Sept. 26, JAPAN: typhoon off Honshu date killed 1,200-1,600.
 1955 Sept. 19, MEXICO: Hurricane Estel killed over 200 in Tampico area.
 1958 Sept. 27-28, JAPAN: Typhoon killed over 600 persons.

Fires and Explosions

WORLD

- 1666 Sept. 2, ENGLAND: "Great Fire of London" destroyed St. Paul's Church, etc. Damage 10 million pounds.
 1812 Sept. 14, RUSSIA: fire started by Russians in Moscow after French occupation destroyed 30,800 houses.
 1917 Dec. 6, CANADA: explosion and fire at Halifax when ammunition ship collided with a vessel; 1,500 dead.
 1922 ASIA MINOR: more than three-fifths of Smyrna destroyed by fire following Turkish occupation.
 1948 July 28, GERMANY: Hundreds killed in Ludwigshafen works explosion.
 1949 Sept. 2, CHINA: fire on Chungking waterfront killed 1,700.
 1955 June 11, FRANCE: crash and explosion of racing car into crowd during Grand Prix race, Le Mans, killed 82.
 1956 Aug. 7, COLOMBIA: about 1,200 reported killed when 7 army ammunition trucks exploded at Cali.
 1956 Aug. 8, BELGIUM: 262 died in coal mine fire at Marcinelle.
 1958 Feb. 19, INDIA: explosion in coal mine near Asansol killed 181.
 1958 Feb. 19, BAHREIN: British freighter *Seistan* exploded; 53 killed.
 1960 July 14, GUATEMALA CITY: hospital for insane destroyed by fire; 225 dead.

UNITED STATES

- 1835 Dec. 16, NEW YORK CITY: 530 buildings destroyed by fire.
 1871 Oct. 8, CHICAGO: the "Chicago Fire" burned 17,450 buildings, killed 250 persons; 196 million damage.
 1871 Oct. 8, PESHTIGO, WIS.: over 1,200 lives lost; 2 billion trees burned.

- 1872 Nov. 9, BOSTON: fire destroyed buildings; 75 million damage.
 1903 Dec. 30, CHICAGO: Iroquois Theatre fire killed 602.
 1904 Feb. 7, BALTIMORE, MD.: Bush section burned; 125 million damage.
 1937 March 18, NEW LONDON, TEXAS: explosion destroyed schoolhouse; children and 14 teachers killed.
 1942 Nov. 28, BOSTON: Coconut Grove night club fire killed about 500.
 1944 July 17, PORT CHICAGO: 300 killed in ammunition ships explode.
 1946 Dec. 7, ATLANTA: fire in Winthrop Hotel killed 119.
 1947 March 25, CENTRALIA, ILL.: explosion in coal mine killed 111 miners.
 1947 April 16-18, TEXAS CITY, TEXAS: most of city destroyed, over 500 killed following explosion on ship.
 1951 Dec. 21, near WEST FRANKFORT, KY.: 119 coal miners died in explosion.
 1953 Oct. 16, BOSTON, MASS.: explosion and fire aboard U.S.S. *Leyte* killed 31.
 1956 Nov. 25, near SAN DIEGO, CALIF.: Forest fires destroyed about 4,000 ac.; 11 killed.
 1957 Feb. 4, near BISHOP, VA.: 37 killed in coal mine blast.
 1957 Feb. 5, RENO, NEV.: gas explosion destroyed city block; 2 died.
 1958 April 18, OKINAWA: underwater explosion of U. S. munitions ship, in World War II, killed 40 persons.
 1958 Dec. 1, CHICAGO, ILL.: fire at Lady of the Angels school killed 1.
 1959 Mar. 5, near LITTLE ROCK, ARK.: fire destroyed dormitory of Little Rock Boys Industrial School; 21 dead.

Shipwrecks (not including military or naval action)

WORLD

May 11, *LADY OF THE LAKE*: bound from England to Quebec, struck iceberg; 215 perished.

Sept. 29, *ANNIE JANE*: emigrant vessel off coast of Scotland; 348 died.

March 5, *PRINCIPE DE ASTURIAS*: Spanish steamer struck rock off Sebastien Pt.; 500 drowned.

April 15, *TITANIC*: sank after colliding with iceberg; 1,513 died.

May 29, *EMPRESS OF IRELAND*: sank after collision in St. Lawrence River; 1,024 perished.

Nov. 12, *VESTRIS*: British steamer sank in gale off Virginia; 110 died.

June 14, French excursion steamer overturned in gale off St. Nazaire; approximately 450 died.

June 1, Submarine *THETIS*: sank in Liverpool Bay, Eng.; 99 perished.

Oct. 2, *QUEEN MARY*: rammed and sank a British cruiser; 338 aboard the cruiser died.

Dec. 3, *KIANGYA*: Chinese refugee ship wrecked in explosion; about 1,000 believed dead.

Jan. 27, *TAIPING*: Chinese liner collided with collier and both sank; at least 600 died.

Sept. 17, *NORONIC*: Canadian Great Lakes cruise ship burned at Toronto dock; about 130 died.

Jan. 12, *TRUCULENT*: British submarine sank in Thames estuary after collision with tanker; 64 dead.

April 16, *AFFRAY*: British sub sank in English channel; 75 dead.

Jan. 9, *CHANG TYONG-HO*: South Korean ferry foundered off Pusan; 249 reported dead.

Jan. 31, *PRINCESS VICTORIA*: British ferry sank in Irish Sea; 133 lost.

Aug. 1, *MONIQUE*: French motor ship with 120 aboard disappeared in South Pacific.

1956 July 25, *ANDREA DORIA*: Italian liner collided with Swedish liner *Stockholm* off Nantucket Island, Mass., sinking next day; 52, mostly passengers aboard Italian ship, dead or unaccounted for; more than 1,600 rescued.

1958 March 1, Passenger ferry sank in squall in Sea of Marmara, Turkey; over 200 killed.

1959 Jan. 30, *HANS HEDTOFT*: Danish passenger-cargo ship hit iceberg and sank off Greenland; 95 dead.

U. S. AND U. S. LINES

1865 April 27, *SULTANA*: boiler explosion on Mississippi River steamboat near Memphis; 1,450 killed.

1898 Nov. 26, *CITY OF PORTLAND*: Loss of 157 off Cape Cod.

1904 June 15, *GENERAL SLOCUM*: excursion steamer burned in New York Harbor; 1,021 perished.

1915 July 24, *EASTLAND*: Great Lakes excursion steamer overturned in Chicago River; 812 died.

1934 Sept. 8, *MORRO CASTLE*: about 130 killed in fire off Asbury Pk., N. J.

1939 May 23, Submarine *SQUALUS*: sank with 59 men off Hampton Beach, N. H.; 33 crew members saved.

1945 April 9, U. S. ship, loaded with aerial bombs, exploded at Bari, Italy; at least 360 killed.

1952 Jan. 10, *FLYING ENTERPRISE*: freighter sank about 35 miles off southwest England after valiant 12-day effort by captain, Henrik K. Carlsen, to save ship.

1952 April 26, *HOBSON*: minesweeper collided with aircraft carrier *Wasp* and sank during night maneuvers in mid-Atlantic; 176 persons lost.

1954 Oct. 7, *MORMACKITE*: freighter capsized off Cape Henry, Va.; 37 lost.

1956 Sept. 15, *PELAGIA*: freighter sank in storm off Norway; 32 lost.

Aircraft Accidents (not including military or naval action)

WORLD

Aug. 24, *ENGLAND*: *ZR-2*, British dirigible, broke in two on trial trip near Hull; 62 died.

Oct. 5, *FRANCE*: British dirigible, *R-101*, crashed at Beauvais; 47 died.

May 18, U.S.S.R.: stunt flier crashed into the *Maxim Gorkey*; 49 killed.

July 24, *COLOMBIA*: military plane crashed into grandstand during air review at Bogotá, killing 53.

1947 Feb. 15, *COLOMBIA*: Avianca airliner crashed near Bogotá; 53 killed.

1950 March 12, near *CARDIFF*, *WALES*: crash of chartered airliner killed 80.

1950 Nov. 13, near *GRENOBLE*, *FRANCE*: Canadian plane carrying Holy Year pilgrims crashed; 58 dead.

1956 Feb. 18, near *VALLETTA*, *MALTA*: Scottish airliner crash killed 50.

1956 Feb. 20, near *CAIRO*, *EGYPT*: desert crash of French airliner; 52 died.

- 1956 June 20, off ASBURY PARK, N. J.: Venezuelan airliner exploded and fell into Atlantic, killing 74.
- 1956 Dec. 9, near CHILLIWACK, B. C., CANADA: Canadian airliner crashed; all 62 aboard killed.
- 1957 March 17, near CEBU CITY, PHILIPPINES: Pres. Ramón Magsaysay and 24 others killed in crash.
- 1957 July 16, BIAK ISLAND, NEW GUINEA: Dutch airliner crash killed 57.
- 1957 Aug. 11, near QUEBEC, CANADA: 79 died in crash of chartered airliner.
- 1958 Feb. 6, near MUNICH, GERMANY: British airliner crashed and burned; 21 persons, including 7 members of Manchester soccer team, were killed.
- 1958 Aug. 14, near IRELAND: Dutch KLM Super-Constellation crashed into North Atlantic; 99 killed.
- 1958 Oct. 17, near KANASH, U.S.S.R.: Soviet jet airliner crashed; 75 dead.
- 1959 Jan. 16, MAR DEL PLATA, ARGENTINA: Argentine airliner crashed; 51 dead.
- 1959 June 26, MILAN, ITALY: TWA Constellation broke apart and crashed; 68 killed.
- 1959 Sept. 24, BORDEAUX, FRANCE: French airliner crashed, killing 53.
- 1960 Jan. 19, near ANKARA, TURKEY: Scandinavian Airlines crash killed 41.
- 1960 Jan. 21, MONTEGO BAY, JAMAICA: Columbian airliner exploded; 37 died.
- 1960 Feb. 5, near COCHABAMBA, BOLIVIA: Bolivian airliner crashed, killing 59.
- 1960 Feb. 25, RIO DE JANEIRO, BRAZIL: U.S. Navy plane flying Navy musicians to perform at dinner given by visiting Pres. Eisenhower, collided with Brazilian airliner, killing 61.
- 1960 Feb. 25, SHANNON, IRELAND: Alitalia airliner crashed; 33 dead.
- 1960 June 24, GUANABARA BAY, BRAZIL: Real Airliner crashed in fog; 51 dead.
- 1960 Aug. 29, DAKAR, SENEGAL: French plane crashed into sea; 63 dead.
- U. S. AND U. S. LINES**
- 1925 Sept. 3, CALDWELL, OHIO: U. S. dirigible *Shenandoah* broke apart; 14 dead.
- 1933 April 4, NEW JERSEY COAST: U. S. dirigible *Akron* crashed; 73 died.
- 1937 May 6, LAKEHURST, N. J.: German zeppelin *Hindenburg* destroyed by fire at tower mooring; 36 killed.
- 1947 June 13, near LEESBURG, VA.: 50 killed in crash of airliner.
- 1947 Oct. 24, BRYCE CANYON, UTAH: airliner crashed into hillside after catching fire in midair; 52 killed.
- 1949 June 7, near SAN JUAN, P. R.: crash of converted army transport into ocean killed 53; 28 rescued.
- 1949 Nov. 1, WASH., D. C.: fighter rammed airliner, killing 55.
- 1950 Aug. 31, near CAIRO, EGYPT: crash U. S. airliner killed 55, including 23 Americans.
- 1951 March 23, ATLANTIC OCEAN: U. S. Force transport with 53 aboard appeared.
- 1951 April 25, near KEY WEST, Cuban airliner and U. S. Navy plane collided; 43 killed.
- 1951 June 30, ROCKY MOUNTAIN NATIONAL PARK, COLO.: airliner crash killed 56.
- 1951 Dec. 16, ELIZABETH, N. J.: nonstop airliner crash killed 56.
- 1952 Jan. 22, ELIZABETH, N. J.: 29 killed including former Sec. of War Herbert P. Patterson, when airline plane crashed into apartment; 7 were on ground.
- 1952 Feb. 11, ELIZABETH, N. J.: third major air disaster in Elizabeth within 2 months fatally injured 33.
- 1952 April 11, near SAN JUAN, P.R.: Rico: airliner crashed into sea; 17 killed, 17 rescued.
- 1952 April 29, NORTH CENTRAL BRANCH: airliner bound for New York crashed in jungle; 50 died.
- 1952 Nov. 23, near ANCHORAGE, ALA.: Air Force transport crash; 52 killed.
- 1952 Dec. 20, MOSES LAKE, WASHINGTON: crash of Air Force "Globemaster" killed 87 servicemen, injured 2.
- 1953 Feb. 14, GULF OF MEXICO: airliner crash during storm killed 46.
- 1953 June 18, near TOKYO, JAPAN: crash of U. S. Air Force "Globemaster" killed 129 servicemen.
- 1953 July 11, PACIFIC OCEAN: airliner crashed about 325 mi. east of Midway Island; 58 persons were killed.
- 1954 Oct. 31, ATLANTIC OCEAN: U. S. Navy plane with 42 aboard lost.
- 1955 March 22, near HONOLULU, HAWAII: crash of U. S. navy transport killed 66.
- 1955 Aug. 11, near EDELWEILER, GERMANY: two U. S. troop carriers collided; 66 air force personnel killed.
- 1955 Oct. 6, near LARAMIE, WYO.: airliner hit mountain; 66 died.
- 1955 Nov. 1, near LONGMONT, COLO.: airliner placed time-bomb destination in flight, killing 44.
- 1956 June 30, GRAND CANYON, ARIZONA: died in collision of two airliners; worst commercial air disaster in date.
- 1956 July 13, near FORT DIX, N. J.: 66 aboard killed in crash of Air Force transport.

- Oct. 11, ATLANTIC OCEAN: U. S. A. F. plane disappeared; 59 aboard.
- Feb. 1, NEW YORK, N. Y.: airliner crash on Rikers Island killed 20 of 101 aboard.
- March 21, PACIFIC OCEAN: U. S. Air Force plane disappeared; 67 lost.
- Feb. 1, LOS ANGELES, CALIF.: military air transport and Navy bomber collided in flight; 47 servicemen killed.
- March 27, BRIDGEPORT, TEX.: 2 Air Force transports collided; 18 killed.
- April 6, MIDLAND, MICH.: Capital Airlines plane crashed; 47 killed.
- April 21, near LAS VEGAS, NEV.: airliner and Air Force jet plane collided in flight; 49 killed.
- 1959 Feb. 3, NEW YORK, N. Y.: American Airlines Lockheed Electra turboprop plane crashed in East River; 65 dead.
- 1959 May 12, near BALTIMORE, MD.: Capital Airlines Viscount turboprop plane exploded and crashed; 31 dead.
- 1959 Sept. 29, near BUFFALO, TEXAS: Braniff turboprop Electra exploded in midair; 34 dead.
- 1959 Nov. 16, GULF OF MEXICO: National Airlines plane crashed, killing 42.
- 1960 Jan. 6, En route from N. Y. to Miami: National Airlines plane disintegrated; 34 died. Bomb suspected.
- 1960 Mar. 17, over TELL CITY, INDIANA: Northwest Airlines turboprop Electra exploded in midair, killing 63.

Railroad Accidents

WORLD

- March 17, DES JARDINS (SOULANGES) CANAL, CANADA: train derailed on bridge; about 60 killed.
- June 29, near BELOEIL, CANADA: about 90 killed when train ran through open switch.
- Dec. 28, DUNDEE, SCOTLAND: train blown off Tay bridge; 73 drowned.
- June 24, near CUARTLA, MEXICO: about 200 died when train fell into river.
- July 13, near TCHERNY, RUSSIA: more than 150 killed in derailment.
- June 12, near ARMAGH, IRELAND: about 80 killed in collision.
- June 14, near BASEL, SWITZERLAND: about 100 killed in collision.
- May 22, GRETNA, SCOTLAND: two passenger trains and troop train collided; 227 killed.
- Dec. 12, MODANE, FRANCE: almost 550 killed in derailment of troop train near mouth of Mt. Cenis tunnel.
- Dec. 22, near MAGDEBURG, GERMANY: more than 125 killed in collision; 99 killed in another wreck near Fried-richshafen.
- Jan. 29, OSAKA, JAPAN: 200 killed in collision.
- March 2, near SALERNO, ITALY: 521 suffocated when Italian train stalled in tunnel.
- Oct. 22, near NOWY DWOR, POLAND: more than 200 reported killed in derailment of Danzig-Warsaw express.
- April 6, near RIO DE JANEIRO, BRAZIL: train wrecked when bridge collapsed; 108 killed or missing.
- March 4, near RIO DE JANEIRO, BRAZIL: about 120 reported killed in collision of 2 trains.
- 1952 Oct. 8, HARROW-WEALDSTONE, ENGLAND: two express trains crashed into commuter train; 112 dead.
- 1953 Dec. 24, near WAIOURI, NEW ZEALAND: train plunged through bridge; 155 dead and others missing.
- 1953 Dec. 24, near SAKVICE, CZECHOSLOVAKIA: crash of two trains reported to have killed 103.
- 1956 Sept. 2, near MAHBUBNAGAR, INDIA: at least 120 killed when bridge collapsed under train.
- 1957 Sept. 1, near KENDAL, JAMAICA: about 175 killed when train plunged into ravine.
- 1957 Sept. 29, near MONTGOMERY, WEST PAKISTAN: express train crashed into standing oil train; nearly 300 killed.
- 1957 Dec. 4, ST. JOHN'S, ENGLAND: 92 killed, 187 injured as one commuter train crashed into rear of another in dense fog.

UNITED STATES

- 1943 Dec. 16, near RENNERT, N. C.: 72 killed in derailment and collision.
- 1944 Dec. 31, near OGDEN, UTAH: 48 killed in collision.
- 1946 April 25, NAPERVILLE, ILL.: at least 47 killed in collision.
- 1950 Feb. 17, ROCKVILLE CENTRE, N. Y.: head-on crash of two commuter trains killed 30.
- 1950 Nov. 22, RICHMOND HILL, N. Y.: 79 died when one commuter train crashed into rear of another.
- 1951 Feb. 6, WOODBRIDGE, N. J.: 85 died when commuter train plunged through temporary overpass.
- 1958 Sept. 15, near BAYONNE, N. J.: over 40 killed when train went through open drawbridge.

WORLD GEOGRAPHY AND MISCELLANEOUS

Explorations and Discoveries

Africa

Country or place	Event	Explorer or discoverer	Date
Sierra Leone	Visited	Hanno, Carthaginian seaman	c. 52
Congo River	Mouth discovered	Cão, Portuguese navigator	c. A.D. 1482
Cape of Good Hope	Doubled	Bartholomeu Diaz, Portuguese navigator	1482
Gambia River	Explored	Mungo Park, Scottish explorer	1793
Sahara Desert	Crossed	Denham and Clapperton, English explorers	1822-23
Zambezi River	Discovered	Livingstone, Scottish explorer	1851
Sudan	Explored	Barth, German explorer	1852-53
Victoria Falls	Discovered	Livingstone	1855
Lake Tanganyika	Discovered	Burton and Speke, British explorers	1858
Congo River	Traced	Stanley, British explorer	1874

Asia

Punjab (India)	Visited	Alexander the Great	326 B.C.
China	Visited	Marco Polo, Italian traveler	c. A.D. 1271
Tibet	Visited	Odoric, Italian monk	c. 1324
Southern China	Explored	Conti, Italian adventurer	c. 1444
India	Visited by Cape route	Vasco da Gama, Portuguese navigator	1498
Japan	Visited	St. Francis Xavier of Spain	1549
Arabia	Explored	Niebuhr, German explorer	1761
China	Explored	Richthofen, German scientist	1868
Mongolia	Explored	Przhevalsky, Russian explorer	1870-71
Central Asia	Explored	Hedin, Swedish scientist	1890-1901

Europe

Shetland Islands	Visited	Pytheas of Massilia (Marseille)	c. 325 B.C.
North Cape	Rounded	Ottar, Norwegian explorer	c. A.D. 870
Iceland	Colonized	Norwegian noblemen	c. 890-900

North America

Greenland	Colonized	Eric the Red, Norwegian navigator	c. A.D. 980
Labrador; Nova Scotia (?)	Discovered	Leif Ericsson, Norse explorer	1000
West Indies	Discovered	Christopher Columbus, Italian navigator	1492
North America	Coast discovered	John Cabot, for British	1497
Pacific Ocean	Discovered	Balboa, Spanish explorer	1513
Florida	Explored	Ponce de León, Spanish explorer	1513
Mexico	Conquered	Cortez, Spanish adventurer	1519
St. Lawrence River	Discovered	Cartier, French navigator	1535
Southwest U. S.	Explored	Coronado, Spanish explorer	1540-41
Colorado River	Discovered	Alarcón, Spanish explorer	1540
Mississippi River	Discovered	Hernando de Soto, Spanish explorer	1540
Frobisher Bay	Discovered	Frobisher, English seaman	1577
Maine Coast	Explored	Champlain, French explorer	1600
Jamestown, Va.	Settled	Smith, English colonist	1607
Hudson River	Explored	Hudson, English navigator	1609
Hudson Bay (Canada)	Discovered	Hudson	1610
Baffin Bay	Discovered	Baffin, English navigator	1616
Lake Michigan	Navigated	Nicolet, French explorer	1634
Arkansas River	Discovered	Marquette and Joliet, French explorers	1673
Mississippi River	Explored	LaSalle, French explorer	1682
Bering Strait	Discovered	Bering, Danish explorer	1741
Alaska	Discovered	Bering	1741
Mackenzie River (Canada)	Discovered	Mackenzie, Scottish-Canadian explorer	1781
Northwest U. S.	Explored	Lewis and Clark	1804-06

Country or place	Event	Explorer or discoverer	Date
East Passage (Arctic Ocean)	Navigated	Nordenskjöld, Swedish explorer	1879
and	Explored	Peary, American explorer	1892
West Passage	Navigated	Amundsen, Norwegian explorer	1906

South America

ent	Visited	Columbus, Italian navigator	1498
	Discovered	Cabral, Portuguese explorer	1500
	Conquered	Pizarro, Spanish explorer	1532-33
n River	Explored	Orellana, Spanish explorer	1541
horn	Discovered	Schouten, Dutch navigator	1615

Oceania

Guinea	Visited	Menezes, Portuguese explorer	1526
lia	Visited	Jansz, Dutch explorer	1606
nia	Visited	Tasman, Dutch navigator	1642
lia	Explored	Sturt, English explorer	1828
lia	Explored	Burke and Wills, Australian explorers	1861

Arctic, Antarctic and Miscellaneous

Exploration	Expedition	Magellan's ships circled globe	1519-22
ergen	Visited	Barents, Dutch navigator	1596
ctic Circle	Crossed	Cook, English navigator	1773
tica	Discovered	Palmer, U S. explorer (archipelago) and Bellingshausen, Russian navigator (mainland)	1820-21
tica	Explored	Wilkes, American explorer	1840
Pole	Discovered	Peary, American explorer	1909
Pole	Discovered	Amundsen, Norwegian explorer	1911

The Seven Wonders of the World

THE PYRAMIDS OF EGYPT

A group of three pyramids, *Khufu*, *Khafra*, and *Menkaure* at Giza, outside modern Cairo, are often called the first wonder of the world. It is also the oldest and only surviving wonder. The largest pyramid, built by Khufu (Cheops), had an original estimated height of 482 ft. (now approximately 450 ft.). The exact date of its construction is unknown and has been estimated as early as 2500 B.C. but is probably closer to 2900 B.C.

THE HANGING GARDENS OF BABYLON

Listed as the second wonder, these gardens were supposedly built by Nebuchadnezzar about 600 B.C. to please his queen, Semiramis. They are also associated with the Assyrian Queen, Semiramis. Archaeologists surmise that the gardens were laid out in a vaulted building, with provisions for irrigation water. The terraces were said to be 75 to 300 ft. high. The Walls of Babylon, also built by Nebuchadnezzar, are sometimes referred to as the (or the seventh) wonder instead of the Hanging Gardens.

THE TEMPLE OF ZEUS (JUPITER) AT OLYMPIA

The work of Phidias (5th century B.C.), the colossal figure in gold and ivory was reputed to be 40 ft. high. All trace of it is lost, but there are reproductions on coins.

THE TEMPLE OF ARTEMIS (DIANA) AT EPHEBUS

A beautiful structure, begun about 350 B.C. in honor of a non-Hellenic goddess who later became identified with the Greek goddess of the same name. The temple, with Ionic columns 60 feet high, was destroyed by invading Goths A.D. 262.

THE MAUSOLEUM AT HALICARNASSUS

This famous monument was erected by Queen Artemisia in memory of her husband, King Mausolus of Caria in Asia Minor, who died in 353 B.C. Some remains of the structure are in the British Museum. This shrine is the source of the modern word "mausoleum."

THE COLOSSUS AT RHODES

This bronze statue of Helios (Apollo), about 105 ft. high, was the work of the sculptor Chares, who reputedly labored for 12 years before completing it in 280 B.C. It was destroyed during an earthquake in 224 B.C.

THE PHAROS OF ALEXANDRIA

The seventh wonder was the Pharos (lighthouse) of Alexandria, built by Sosistratus of Cnidus during the 3rd century B.C. on the island of Pharos off the coast of Egypt. It was destroyed by an earthquake in the 13th century.

Representative Mountain Peaks of the World

Mountain peak	Range	Location	Height
Everest	Himalayas	Tibet-Nepal	29,000
Godwin Austen (K2)	Karakoram	India	28,350
Kanchenjunga	Himalayas	Nepal	28,350
Makalu	Himalayas	Tibet-Nepal	28,340
Dhaulagari	Himalayas	Nepal	28,330
Gurla Mandhata	Himalayas	Tibet	28,300
Tirich Mir	Hindu Kush	Pakistan	27,990
Muztagh Ata (K5)	Pamirs	Sinkiang	27,980
Muztagh	Kunlun	Sinkiang	27,970
Aconcagua	Andes	Argentina	27,960
Dos Conos	Andes	Argentina	27,950
Ojos del Salado	Andes	Argentina-Chile	27,940
Huascarán	Andes	Peru	27,930
Llullaillaco	Andes	Argentina-Chile	27,920
Kailas	Himalayas	Tibet	27,910
Mercedario	Andes	Argentina	27,900
Tupungato	Andes	Argentina-Chile	27,890
Sajama	Andes	Bolivia	27,880
Chimborazo	Andes	Ecuador	27,870
McKinley	Alaska	Alaska	27,860
Logan	St. Elias	Canada (Yukon Territory)	27,850
Killmanjaro	.....	Tanganyika	27,840
Cotopaxi	Andes	Ecuador	27,830
Cayambe	Andes	Ecuador	27,820
Misti	Andes	Peru	27,810
Orizaba (Citlaltepetl)	Sierra Madre Oriental	Mexico	27,800
Elbrus	Caucasus	U.S.S.R.	27,790
St. Elias	St. Elias	Alaska-Canada	27,780
Vilcanota	Andes	Peru	27,770
Popocatepetl	Cordillera de Anáhuac	Mexico	27,760
Cerro de Cuz	Andes	Bolivia	27,750
Ixtaccihuatl	Cordillera de Anáhuac	Mexico	27,740
Tolima	Andes	Colombia	27,730
Dikh-Tau	Caucasus	U.S.S.R.	27,720
Kenya	.....	Kenya	27,710
Ruwenzori	Ruwenzori	Belgian Congo-Uganda	27,700
Kazbek	Caucasus	U.S.S.R.	27,690
Bona	Wrangell	Alaska	27,680
Klyuchevskaya	Kamchatka	U.S.S.R.	27,670
Savalan	Elburz	Iran	27,660
Blanc	Alps	France	27,650
Lister	.....	Antarctica	27,640
Fairweather	St. Elias	Alaska	27,630
Dashan	Simen	Ethiopia	27,620
Markham	.....	Antarctica	27,610
Matterhorn	Alps	Switzerland-Italy	27,600
Whitney	Sierra Nevada	California	27,590
Elbert	Rockies	Colorado	27,580
Massive	Rockies	Colorado	27,570
Rainier	Cascades	Washington	27,560
Longs	Rockies	Colorado	27,550
Colima	Sierra Madre Occidental	Mexico	27,540
Shasta	Sierra Nevada	California	27,530
Pikes Peak	Rockies	Colorado	27,520
Finsteraarhorn	Alps	Switzerland	27,510
Mauna Kea	.....	Hawaii	27,500
Gannett Peak	Rockies	Wyoming	27,490
Mauna Loa	.....	Hawaii	27,480
Jungfrau	Bernese Alps	Switzerland	27,470
Cameroon	.....	British Cameroons	27,460
Erebus	.....	Antarctica	27,450
Robson	Rockies	British Columbia	27,440
Fujiyama (Fujisan)	.....	Japan	27,430
Cook	Southern Alps	South Island, New Zealand	27,420
Hood	Cascades	Oregon	27,410

Large Islands of the World

Island and status	Location	Area, sq. mi.
LAND (Danish territory)	North Atlantic	839,782
GUINEA (Under Dutch crown, west U. N. trust territory under Australian administration, northeast part; Italian territory, southeast part)	Southwest Pacific	312,329
GO (Indonesia, south part; British protectorate and colonies, north part)	South China Sea	290,012
MASCAR (French overseas territory)	Off southeast coast of Africa	227,737
N (Canada, Northwest Territories)	Arctic	183,810
RA (Indonesia)	Northeast Indian Ocean	163,145
U (Japanese home island)	Sea of Japan—Pacific	91,278
BRITAIN (Eng., Scotland, Wales)	Off coast of northwest Europe	88,140
RIA (Canada, Northwest Territories)	Arctic	80,450
ERE (Canada, Northwest Territories)	Arctic Ocean	75,024
ES (Indonesia)	Southwest Pacific	69,255
ISLAND, NEW ZEALAND	South Pacific	58,093
(Indonesia)	Northeast Indian Ocean	48,504
ISLAND, NEW ZEALAND	South Pacific	44,281
OUNDLAND (Canadian province)	North Atlantic	42,734
(Republic)	Caribbean Sea	42,350
ND (Republic)	Philippine Islands	40,814
NAO	North Atlantic	39,688
AIDO (Japanese home island)	Philippine Islands	36,537
ND (Ireland, republic, south part; Northern Ireland, part of United Kingdom)	Sea of Japan—Pacific	34,084
NIOLA (Dominican Republic, east Haitian republic, west part)	West of Great Britain	31,840
NIA (Australian state)	Caribbean Sea	30,075
(Canada, Northwest Territories)	South of Australia	26,215
(Member of Commonwealth of ns)	Arctic	25,992
LIN (U.S.S.R.)	Indian Ocean	25,332
(Canada, Northwest Territories)	North of Japan	24,560
A DEL FUEGO (East part to Argentina, west part to Chile)	Arctic	20,484
LE (Canada, Northwest Territories)	Southern tip of South America	18,530
AMPTON (Canada, N. W. Territories)	Arctic	16,164
	Hudson Bay	16,114

Oceans and Seas

Name	Area, sq. mi.	Average depth, feet	Greatest known depth, ft.	Place of greatest known depth
Ocean	63,801,700	14,048	35,400	Off Mindanao
e Ocean	31,830,800	12,880	30,246	Off Puerto Rico
Ocean	28,356,300	13,002	22,968	Off Sumatra-Java
Ocean	5,440,200	3,953	17,850	77° 45' N.; 175° W.
anean Sea*	1,145,100	4,688	15,564	Off Cape Matapan, Greece
an Sea	1,049,500	8,685	22,788	Off Cayman Islands
China Sea	895,400	5,419	18,090	West of Luzon
Sea	875,800	4,714	13,422	Off Buldir Island
Mexico	618,200	4,874	12,744	Sigsbee Deep
okhotsk	589,800	2,749	11,400	146° 10' E.; 46° 50' N.
ina Sea	482,300	617	9,126	25° 16' N.; 125° E.
Bay	475,800	420	600	Near entrance
Japan	389,100	4,429	12,276	Central Basin
n Sea	308,000	2,854	12,392	Off Car Nicobar Island
ea	222,100	308	2,165	Skagerrak
	169,100	1,611	7,254	Off Port Sudan
ea	163,000	180	1,380	Off Gotland

ing Black Sea and Sea of Azov. NOTE: For Caspian Sea, see Large Lakes of World elsewhere in this

Famous Waterfalls of the World

Waterfall	Location	River	Height
Angel	Venezuela	Tributary of Caroní	
Cuquenán, or Kukenaam	Venezuela-British Guiana	Cuquenán	
Sutherland	South Island, N. Z.	Arthur	
Tugela	Natal, South Africa	Tugela	
Ribbon (Yosemite)	California	Creek, flowing into Yosemite	
Upper Yosemite	California	Yosemite Creek, tributary of Merced	
Gavarnie	Southwestern France	Gave de Pau	
Takkakaw	British Columbia	Tributary of Yoho	
Widow's Tears (Yosemite)	California	Tributary of Merced	
Staubbach	Switzerland	Staubbach (Lauterbrunnen valley)	
Trummelbach	Switzerland	Trummelbach (Lauterbrunnen)	
Middle Cascade (Yosemite)	California	Yosemite Creek, tributary of Merced	
Multnomah	Oregon	Multnomah Creek, tributary of Columbia	
Vettisfos	Norway	Morkedöla	
King Edward VII	British Guiana	Courantyne	
Gersoppa	India	Sharavati	
Kaleteur	British Guiana	Pataro	
Kalambo	Tanganyika-N. Rhodesia		
Fairy (Mt. Rainier Park)	Washington	Stevens Creek	
Maradalsfos	Norway	Stream flowing into Eklidalsvand (lake)	
Skykkjefos	Norway	In Skykkjedal (valley) of Inner Hardanger Flord	
Terni	Italy	Velino, tributary of Nera	
Maletsunyane (Le Bihan)	Basutoland, Africa	Maletsunyane	
Bridal Vell (Yosemite)	California	Bridal Vell Creek, tributary of Merced	
Nevada (Yosemite)	California	Merced	
Voringfos	Norway	Bjorela	
Skjaeggedalsfos	Norway	Tyssaa	
Marina	British Guiana	Tributary of Kuribrong, a tributary of the Pataro	
Tequendama	Colombia	Bogotá	
King George's	Cape Province, South Africa	Orange	
Herval Cascades	Brazil	Paraná	
Guayra	Paraguay-Brazil	Illilouette Creek, tributary of Merced	
Illilouette (Yosemite)	California	Granite Creek	
Granite (Mt. Rainier Park)	Washington	Zambezi	
Splendor of Sun	Nikko, Japan	Van Trump Creek	
Victoria	Southern Rhodesia	Yosemite Creek	
Comet (Mt. Rainier Park)	Washington	Merced	
Lower Yosemite	California	South Nahanni, tributary of Mackenzie	
Vernal (Yosemite)	California	Yellowstone	
Virginia	Northwest Territories, Canada	Hamilton	
Lower Yellowstone	Wyoming	Paradise	
Grand	Labrador, Canada	Snoqualmie	
Sluiskin (Mt. Rainier Park)	Washington	Tallulah	
Snoqualmie	Washington	Snake	
Seven Falls	Colorado	Paradise	
Tallulah	Georgia	Niagara	
Shoshone	Idaho	Tower Creek, tributary of Yellowstone	
Narada (Mt. Rainier Park)	Washington		
Niagara	New York-Ontario		
Tower (Yellowstone)	Wyoming		

Principal Rivers of the World

River	Source	Outflow	Approx. length, miles
	Lake Victoria	Mediterranean Sea	4,160
	Glacier-fed lakes, Peru	Atlantic Ocean	3,900
Mississippi-Missouri-Rock	Source of Red Rock River, Montana	Gulf of Mexico (mouth of South west Pass)	3,890
	Altai Mts., U.S.S.R.	Gulf of Ob	3,200
Yangtze Kiang	Tibetan plateau	China Sea	3,100
	Confluence of Shilka (U.S.S.R.) and Argun (Manchuria) Rivers	Tartary Strait	2,900
	Between Lakes Nyasa and Tanganyika	Atlantic Ocean	2,900
	Baikal Mts., U.S.S.R.	Arctic Ocean	2,800
	Tannu Ola Mountains, western Mongolia	Arctic Ocean	2,800
Yellow River	Source of Red Rock River, Montana	Mississippi River	2,714
Ho (Yellow)	East part of Kunlun Mts., west China	Gulf of Chihli	2,700
	Border of Sierra Leone	Gulf of Guinea	2,600
St. Lawrence	Head of Finlay River, British Columbia	Beaufort Sea (Arctic Ocean)	2,514
	Tibetan highlands	South China Sea	2,500
	Confluence of Jefferson and Madison rivers, Montana	Mississippi River	2,466
	Confluence of Paranaíba and Grande Rivers, southeast Brazil	Río de la Plata (Atlantic Ocean)	2,450
Mississippi	Lake Itasca, Minnesota	Gulf of Mexico (mouth of South-west Pass)	2,348
	Australian Alps, New South Wales	Indian (Southern) Ocean	2,310
	Altai Mts., U.S.S.R.	Ob River	2,300
	Valdai plateau, U.S.S.R.	Caspian Sea	2,300
	Confluence of Gauporé and Maumoré Rivers, Bolivia-Brazil border	Amazon River	2,000
St. Lawrence	St. Louis River, Minn.	Gulf of St. Lawrence	1,900
	Southwest Amazonas, Brazil	Amazon River	1,850
San Juan	San Juan Mts., Colorado	Gulf of Mexico	1,800
San Francisco	Southwest Minas Geraes, Brazil	Atlantic Ocean	1,800
	Junction of Lewes and Pelly, Yukon Territory	Bering Sea	1,800
	Tibet, south of Kunlun Mountains	Gulf of Martaban	1,750
	Black Forest, Germany	Black Sea	1,725
	Dumlu Dag (mountains), Turkey	Persian Gulf	1,700
	Himalayas	Arabian Sea	1,700
	Sierra Parima on Venezuela-Brazil boundary	Atlantic Ocean	1,700
	Near Pyrenopolis, southeast Brazil	Pará River (Atlantic Ocean)	1,700
	Himalayas	Ganges River (Bay of Bengal)	1,680
	Plateau of Yunnan, southwest China	China Sea	1,650
	Head of Bow River, west Alberta, Canada	Hudson Bay	1,600
	11°21'S.; 24°22'E., Northern Rhodesia, Africa	Indian Ocean	1,600
	Himalayas	Bay of Bengal	1,540

River	Source	Outflow	Approx. length, miles
Amu Darya (Oxus)	Nicholas Range, Pamir Mountains, U.S.S.R.	Lake Aral	1,500
Paraguay	Mato Grosso, Brazil	Paraná River	1,500
Yapurá	Andes, Colombia	Amazon River	1,500
Arkansas	Central Colorado	Mississippi River	1,450
Colorado	Grand County, Colorado	Gulf of California	1,450
Dnieper	Valdai Hills, U.S.S.R.	Black Sea	1,400
Negro	Watershed between Orinoco and Amazon	Amazon River	1,400
Ural	Southern Ural Mountains, U.S.S.R.	Caspian Sea	1,400
Ohio-Allegheny	Potter County, Pa.	Mississippi River	1,300
Orange	Basutoland, Africa	Atlantic Ocean	1,300
Irrawaddy	Confluence of N'mai and Mali Rivers, northeast Burma	Bay of Bengal	1,250
Columbia	Columbia Lake, British Columbia	Pacific Ocean	1,214
Saskatchewan	Western Alberta, Canada	Lake Winnipeg	1,205
Darling	Central part of Eastern Highlands, Australia	Murray River	1,180
Tigris	Taurus Mts., Turkey	Euphrates River (Persian Gulf)	1,150
Sungari	Sungari Reservoir, Manchuria, China	Amur River	1,135
Don	Lake Ivan, U.S.S.R.	Sea of Azov	1,100

Large Lakes of the World

Name and location	Area, sq. mi.	Length, miles	Maximum depth, feet	Elevation above sea level, feet
Caspian, U.S.S.R.-Iran†	169,300	795	3,612	
Superior, U. S. A.-Canada	31,820	383	1,302	
Victoria, East Central Africa	26,828	250	270	3.
Aral, U.S.S.R.	26,233	280	222	
Huron, U. S. A.-Canada	23,010	206	750	
Michigan, U. S. A.	22,400	321	923	
Baikal, U.S.S.R.	13,300	385	5,413	1.
Tanganyika, East Central Africa	12,700	420	4,708	2.
Great Bear, Canada	12,000	195	270*	
Great Slave, Canada	11,170	325	—	
Nyasa, Southern Africa	11,000	350	2,580	1.
Erie, U. S. A.-Canada	9,940	241	210	
Winnipeg, Canada	9,398	260	70	
Ontario, U. S. A.-Canada	7,540	193	778	
Balkhash, U.S.S.R.	7,115	430	36	
Ladoga, U.S.S.R.	7,000	125	730	
Onega, U.S.S.R.	3,764	145	408	
Rudolf, Eastern Africa	3,475	185	—	1.
Titicaca, Bolivia-Peru	3,200	125	892	12.
Nicaragua, Nicaragua	3,089	110	200	
Athabaska, Canada	3,058	195	—	
Reindeer, Canada	2,444	155	—	1.
Issyk-Kul, U.S.S.R.	2,230	115	2,300	5.
Koko Nor, China	2,200	66	—	10
Vänern, Sweden	2,143	87	292	
Winnipegosis, Canada	2,086	122	38	
Bangweulu, East Central Africa	1,900	60	15	3.
Nipigon, Canada	1,870	70	—	
Manitoba, Canada	1,817	120	12*	
Urmia, Iran	1,750*	80-90	50	4.
Albert, Uganda, Africa	1,640	100	50	2.
Dubawnt, Canada	1,600	65	—	
Great Salt, U. S. A.	1,500	75	15-25*	4.
Van, Turkey	1,453	80	—	5.

* Average. † The name Caspian Sea is a misnomer; it is a land-locked lake, so classified by oceanographers.

Volcanoes of the Earth

are approximately 430 volcanoes (the Northern Hemisphere and 155 Southern) with recorded eruptions in historical times. Of the 2,500 recorded volcanoes, more than 2,000 have taken place in the Pacific area. Of known active volcanoes, about 80 are of the submarine type.

ATLANTIC-INDIAN AREA

Mediterranean Region

Mt. Vesuvius, southeast of Naples (Italy). Only active volcano on mainland Europe. Pompeii buried by an eruption, A.D. 79. Latest eruption in 1944.

Mt. Etna, eastern Sicily (10,741 ft.). One of the new craters formed in eruptions in 1947. Worst eruption in 50 years occurred Nov., 1950-Jan., 1951.

Islands (north of Sicily): Stromboli (3,000 ft.). Called "Lighthouse of the Mediterranean." Erupted 1956.

Canary Area

Islands: Pico de Teide (Tenerife island of Tenerife) (12,192 ft.).

Verde Islands: Fogo (over 8,000 ft.). Latest eruption in 1857; last until 1951.

Islands: At least 25 volcanoes active in the Azores. These volcanoes very similar to those in Hawaii. **Askja** (4,600 ft.). Largest.

Antilles (West Indian Islands): Mount Pelée, in northwestern Martinique (14,400 ft.). Eruption in 1902 destroyed town of St. Pierre and killed approximately 40,000.

Ocean Region

Islands (east of northern Mozambique): One volcano, Kartala (over 10,000 ft.), is visible for over 100 miles. Last eruption in 1904.

Island (east of Madagascar): La Fournaise (Le Volcan) (8,610 ft.). One of the largest lava flows.

THE PACIFIC AREA

West Portion

Kamchatka: 14-18 active volcanoes. **Klyuchevskaya (Kluchev)** (15,912 ft.) erupted in 1912.

Islands: At least 18 active volcanoes and several submarine outbreaks.

Islands: At least 33 active vents.

Island (Fujisan), southwest of Tokyo (Japan). Symmetrical in outline, snow-capped. Regarded as a sacred mountain.

Adzumayama (7,733 ft.).

Asamayama (8,182 ft.). Continuously active; violent eruption in 1783; latest in 1955.

Bonin (Ogasawara) Islands: **Mt. Suribachi**, on Iwo Jima (546 ft.). A sulfurous steaming volcano. Raising of U. S. flag over Mt. Suribachi was one of the dramatic episodes of World War II.

Samoan archipelago: **Savali**. An eruption in 1905 did considerable damage. **Niuafu** (Tinian) between Samoa and Fiji Islands has a crater 6,000 feet below and 600 feet above water.

Philippine Islands: about 100 eruptive centers; **Hibok Hibok** on Camiguin island erupted in Sept. 1950, and again in Dec. 1951, when about 750 were reported killed or missing; eruptions continued during 1952-53.

Hawaiian Group: **Mauna Loa** (13,680 ft.). Also called "Long Mountain." Discharges more lava than any other volcano. Largest volcanic mountain in the world in cubic content, with crater of 3.7 sq. mi. Violent eruption in June, 1950, with lava pouring 25 mi. into the ocean.

Mauna Kea (13,796 ft.). Highest mountain in group.

Kilauea (4,090 ft.). A vent in side of Mauna Loa but apparently erupts independently of it. One of the most spectacular and active craters. Crater has an area of 4.14 sq. mi. Erupted 1952 and again in 1955, with considerable damage.

Southwest Portion

Sumatra: Ninety volcanoes have been discovered; 12 are now active. The most famous, **Krakatoa**, is a small volcanic island in the Sunda Strait. Numerous volcanic discharges occurred in 1883. One explosion caused the disappearance of the highest peak and the northern part of the island. Fine dust was carried around the world in the upper atmosphere. Over 36,000 persons lost their lives in resultant tidal waves, which were felt as far away as Cape Horn. Active in 1928, 1950 and 1953.

New Zealand: **Tarawera**, on North Island. Severe eruption in 1886 destroyed the famous pink and white sinter terraces of **Rotomahana**, a hot lake.

Ngauruhoe (7,515 ft.). Emits steam and vapor incessantly. Major eruptions occurred 1952-54.

Northeast Portion

Aleutian area: There are 32 active vents known, and numerous inactive cones.

Alaska: **Wrangell** (14,005 ft.) and **Katmai** (about 7,500 ft.).

On June 6, 1912, a violent eruption of

the volcano Nova Rupta occurred, during which the "Valley of Ten Thousand Smokes" was formed.

California, Oregon, Washington: Lassen Peak (10,453 ft.) in California is the only observed active volcano in the U. S. outside Alaska and Hawaii. The last period of activity was 1914-17. Other mountains of volcanic origin include Mt. Shasta (Calif.), Mt. Hood and the mountain containing Crater Lake (Oreg.), and Mt. Rainier (Wash.).

Mexico: Popocatepetl (17,883 ft.). Crater 673 ft. deep and $2\frac{1}{2}$ mi. in circumference. Not entirely extinct; steam still escapes.

Colima (14,239 ft.), in group that has had frequent eruptions.

Orizaba (Citlaltepetl) (18,696 ft.).

Paricutin. First appeared in Feb., 1943. In less than a week a cone over 140 ft. high developed with a crater one quarter mile in circumference. Cone grew over 1,500 ft. in 1943. Erupted 1952.

Boqueron ("Big Mouth"). Newest volcano in Western Hemisphere, discovered Sept., 1952 on San Benedicto island, about 250 mi. south of Lower California.

Guatemala: Santa Maria Quezaltenango (12,361 ft.). Frequent activity between 1902-08 and 1922-28 after centuries of quiescence. Most dangerously active vent

of Central America. Other volcanoes include Tajumulco (13,814 ft.) and At (11,633 ft.).

El Salvador: Izalco, "beacon of Central America," which first appeared in 1770 is still growing (erupted in 1950, 1951). San Salvador, which had a violent eruption in 1923, and Conchagua, which erupted with considerable damage early in 1942.

Nicaragua: Volcanoes include Momotombo and Coseguina. Between Momotombo and Coseguina overlooking the Gulf of Fonseca, there is a string of more than 20 cones, many still active. One of them, Cerro Negro, erupted in July, 1947, with considerable damage and loss of life, again in 1948-50.

Southeast Portion

Colombia: Huila (18,700 ft.), a volcano emitting volcanic ash, and Tolima (17,109 ft.).

Eruption of Puracé (15,420 ft.), killed 17.

Ecuador: Cotopaxi (19,344 ft.). Perito Moreno, highest active volcano in the world, has recently formed a cone.

Cayambe (19,170 ft.). Almost on equator.

Chile and Argentina: About 25 active volcanoes; potentially active; destructive eruptions of Villarica, Chile, 1948, and of Nilahue, Argentina, 1955.

Principal Deserts of the World

Desert	Location	Approximate size	Appx. elevation
Atacama.....	North Chile.....	400 mi. long.....	7,000-13,500
Black Rock.....	Northwest Nevada.....	About 1,000 sq. mi.....	2,000-5,000
Colorado.....	Southeast California from San Geronio Pass to Gulf of California.....	200 mi. long and a maximum width of 50 mi.....	Few feet above sea level
Dasht-i-Kavir.....	Southeast of Caspian Sea in Iran.....	.....	2,000
Dasht-i-Lut.....	Northeast of Kerman in Iran.....	.....	1,000
Gobi (Shamo).....	Covers most of Mongolia.....	300,000 sq. mi.....	3,000-5,000
Great Arabian.....	Most of Arabia.....	1,500 mi. long.....	.....
Syrian (El Hamad).....	North of 30° N. Latitude.....	.....	1,850
Nefud (Red Desert).....	South of Jaufr.....	400 mi. by average of 200 mi.....	3,000
Dahna.....	Southeast of Nefud.....	400 by 30 mi.....	.....
Rub' al Khali.....	South portion of Nejd.....	.....	.....
Great Australian.....	Western portion of Australia.....	About one-half the continent.....	600-1,000
Great Salt Lake.....	West of Great Salt Lake to Nevada-Utah line.....	80 by 50 mi.....	4,500
Kalahari.....	South Africa between the Orange and Zambezi Rivers.....	400 by 600 mi., or about 120,000 sq. mi.....	Over 3,000
Kara Kum (Desert of Khiva).....	Southwest Turkestan south of Lake Aral.....	110,000 sq. mi.....	.....
Kizil Kum.....	Central Turkestan southeast of Lake Aral.....	370 by 220 mi., or about 70,000 sq. mi.....	160 near Lake Aral
Libyan.....	Eastern Sahara west of Nile.....	More than 500,000 sq. mi.....	2,000 in southeast
Mohave.....	North of Colorado Desert and south of Death Valley in SE Calif.....	15,000 sq. mi.....	2,000
Nubian.....	From Red Sea to great west bend of the Nile.....	.....	2,500
Painted Desert.....	Northeast Arizona.....	75 mi. wide.....	High plateaus 5,000-6,000
Sahara.....	Northern states of Africa to about 15° N. Lat. and from Red Sea to the Atlantic Ocean.....	3,200 mi. greatest length along 20° N. Lat.; Area over 3,500,000 sq. mi.....	440 below sea level; 11,000 above sea level; average elevation, 1,400-1,500
Takla Makan.....	S. Central Sinkiang in Tarim Basin.....	700 mi. long.....	.....
Thar (Indian).....	Chiefly Rajputana, India.....	About 300 mi. by 300 mi.....	About 500

WORLD	2,852,000	58,333	100.0	4.8	Mt. Everest, Asia, 29,028	Dead Sea, Asia, 1,290 below sea level	24,902	24,860
ASIA, excluding Asiatic U.S.R.; including Philippines and Indonesia	1,592,000	10,599	18.1	150.2	Mt. Everest, Tibet-Nepal, 29,028	Dead Sea, Palestine-Jordan, 1,290 below sea level	5,400*	5,300*
AFRICA	230,000	11,684	20.0	19.7	Mt. Kilimanjaro, Tanganyika, 19,565	Qattara Depression, Egypt, 440 below sea level	4,600	5,000
NORTH AMERICA	256,000	9,355	16.0	27.4	Mt. McKinley, Alaska, 20,320	Death Valley, Calif., 282 below sea level	3,200	4,000
SOUTH AMERICA	134,000	6,889	11.8	19.4	Mt. Aconcagua, Argentina, 22,835	Sea level	3,200	4,600
ANTARCTICA	Uninhabited	6,000	10.3		Mt. Vinson, above 19,000	Sea level		
EUROPE, including Iceland; excluding European U.S.R.	417,000	1,903	3.3	219.1	Mt. Blanc, France, 15,781	Sea level	3,300†	2,400†
AUSTRALIA	9,846	2,974	5.1	3.3	Mt. Kosciusko, 7,352	Lake Eyre, 38 below sea level	2,400	1,900
OCEANIA, incl. New Zealand and British, U. S., French and Australian territories, possessions, etc.	5,954	330	.6	18.0	Mauna Kea, Hawaii, 13,784	Sea level		
U.S.S.R.	208,000	8,603	14.8	24.1	Mt. Pobedy, 24,409	Caspian Sea, 86 below sea level	5,000	2,500

* Including Asiatic U.S.S.R. † Including European U.S.S.R.

HIGH POPULATION DENSITIES (per square mile)

Monaco	32,049.5	Japan	649.4	Germany (East)	392.8	Korea	357.7
Netherlands	909.0	Germany (West)	558.0	Lebanon	386.1	Switzerland	328.4
Maldiv Islands	773.9	United Kingdom	553.7	Ceylon	370.6	Haiti	322.3
Belgium	768.6	Italy	421.7	San Marino	368.4	Luxemburg	320.3

Interesting Caves and Caverns of the World

Aggtelek. In village of same name, northern Hungary. Large stalactitic cavern about 5 miles long.

Altamira Caves. Near Santander, Spain. Contains animal paintings (Old Stone Age art) on roof and walls.

Antiparos. On island of same name in the Grecian Archipelago. Some stalactites are 20 ft. long. Brilliant colors and fantastic shapes.

Blue Grotto. On island of Capri, Italy. Cavern hollowed out in limestone by constant wave action. Now half filled with water because of sinking coast. Name derived from unusual blue light permeating the cave. Source of light is a submerged opening, light passing through the water.

Carlsbad Caverns. Southeast New Mexico. Largest underground labyrinth yet discovered. Three levels: 754, 900, and 1,320 feet below the surface.

Fingal's Cave. On island of Staffa off coast of western Scotland. Penetrates about 200 ft. inland. Contains basaltic columns almost 40 ft. high.

Ice Cave. Near Dobsina, Czechoslovakia. Noted for its beautiful crystal effects.

Jenolan Caves. In Blue Mountain plateau, New South Wales, Australia. Beautiful stalactitic formations.

Kent's Cavern. Near Torquay, England. Source of much information on Paleolithic man.

Geysers exist in many volcanic regions of the world such as Japan and South America, but their greatest development is in Iceland, New Zealand and Yellowstone National Park.

Iceland. The principal geyser area is about 30 miles northwest of Mt. Hekla, where there are more than 100 geysers and hot springs in about two square miles. The main ones are the following:

Great Geyser (Geysir). Sends up a column 160 to 180 ft. high intermittently from an opening more than 9 ft. across and about 70 ft. deep.

Strokkur (Churn). Constant bubbling and occasional eruptions.

New Zealand. There is a great profusion of boiling springs, steam jets and mud volcanoes northeast of Lake Taupo on North Island. Main geysers are *Waikite*, with a 30-35 ft. column, *Pohutu* and *Waimauku*.

United States. There are 120 named geysers in Yellowstone National Park, Wyoming, and perhaps half that number un-

Luray Cavern. Near Luray, Virginia. Large stalactitic and stalagmitic of many colors.

Mammoth Cave. Limestone caverns of central Kentucky. Cave area is 35 miles in diameter but has at least 15 miles of irregular subterranean ways at various levels. Temperature remains fairly constant at 54°F.

Peak Cavern or Devil's Hole. In Nevada. About 2,250 ft. into the mountain. Lowest part is about 600 ft. from the surface.

Postumia (Adelsberg) Grotto. In the Julian Alps, about 25 miles from Trieste. Stalactitic cavern, one of the most beautiful in Europe. *Pivka* (Pivka) River flows through part of it. Caves have many beautiful stalactites.

Singing Cave. Iceland. A lava cavern derived from echoes of people talking in it.

Wind Cave. In Black Hills of South Dakota. Limestone caverns with many stalagmites almost entirely covered. Variety of crystal formations, "boxwork."

Wyandotte Cave. In Crawford County, southern Indiana. A limestone cavern with five levels of passages; the largest in North America. "Mt. Vernon Mountain," approximately 133 miles is believed to be one of the largest underground "mountains."

Geysers

named. Most of the geysers and hot or more hot springs are located in the western portion of the park. The most important are the following:

Norris Geyser Basin has 24 or more geysers; the number varies. There are many of steam vents and hot springs. *Steamboat* is highest, erupting 50-75 ft. and varying from 18 hr. to 3 days. *Minuté*, 15-20 ft. high, several hours. Others include *Steamboat*, *Fountain*, *Wixen*, *Corporal*, *Whirligig* and *Pinwheel*.

Lower Geyser Basin has at least 10 geysers. *Fountain* throws water in all directions at unpredictable intervals. *Clepsydra* erupts violently from a pipe up to 30 ft. *Great Fountain* plays for 15 hr. in spurts from 30 to 60 ft.

Midway Geyser Basin has vast terraces of red, orange, pink and blue colors; there are pools and springs. The beautiful *Grand Prismatic Spring* in *Excelsior* crater discharges boiling water into Firehole River at the rate of 100 gallons per second.

erupts up to 200 ft. at intervals of to 3 mo.; eruptions last about *saisy* sends water up to 75 ft. but ar and frequently inactive.

withful sends up a column varying to 175 ft. at intervals of about 65 ying from 33 to 90 min. Eruptions t 4 min., during which time about l. are discharged.

s seldom erupts, but during its riods sends up streams 150-200 ft.

Group: *Lion* plays up to 60 ft.

every 2-4 days when active; *Little Cub* up to 10 ft. every 1-2 hr. *Big Cub* and *Lioness* seldom erupt.

Castle usually erupts twice daily to a height of 75 ft.

Mammoth Hot Springs: There are no geysers in this area. The formation is travertine. Sides of a hill are steps and terraces over which flow the steaming waters of hot springs laden with minerals. Each step is tinted by algae to many shades of orange, pink, yellow, brown, green and blue. Terraces are white where no water flows.

Famous Ship Canals of the World

	Location	Year opened	Length (mi.)†	Width (ft.)	Depth (ft.)	Locks
.....	Belgium	1939	80.0	53.0	16.5	6
m-Rhine	Netherlands	1952	45.0	164.0	41.0	3
t-Port Arthur	United States	1916	40.0	200.0	34.0	..
ke and Delaware	United States	1927	19.0	250.0	27.0	..
.....	United States	1914	43.0	300.0	34.0	..
.....	Germany	1895	61.3	144.0	36.0	4
.....	Canal Zone	1914	50.0	110.0	41.0	12
nce Seaway	U. S. & Canada	1959	2,400.0†	\$	27.0	7
. Marie	Canada	1895	1.2	60.0	16.8	1
. Marie	United States	1915	1.6	80.0	25.0	4
.....	Egypt	1869	100.6*	197.0	34.0	..
.....	Canada	1931	27.6	80.0	25.0	8

ort Said lighthouse to entrance channel in Suez roads. † In statute miles. ‡ Montreal to Duluth. § 442 there are 11 1/2 miles of locks, 80 ft. wide and 30 ft. deep.

World Extremes of Climate

Recorded shade temperature:

136° F. at Azizlia, Libya, North Africa, September 13, 1922.

States: 134° F. at Death Valley, California, July 10, 1913.

Recorded temperature:

-125.3° F. at Vostok, near south geomagnetic pole, Antarctica, August 25,

ria, -89.9° F. at Oimekon, February 6, 1933, and -89.7° F. at Verkhoyansk, tary 5 and 7, 1892.

States: -70° F. at Rogers Pass, Montana, January 20, 1954.

Mean annual temperature:

88° F. at Lugh, Somaliland,

a, 13-year average.

Lowest mean annual temperature:

World: -71.0° F. at Sovietskaya (78° 24' S. lat., 87° 35' E. long.) (March 1958-Feb. 1959).

States: 77.6° F. at Key West,

la, 30 year normal.

United States: 10.1° at Barrow, Alaska, 30-year record.

a rainfall for 24-hour period:

46 inches at Baguio, Luzon, Philippines, July 14-15, 1911.

ous United States: 38.7 inches at Yankeetown, Florida, September 5-6, 1950.

a recording gauge: 26.12 inches at Hoogeas Camp, California, January 22-42.

a rainfall in one month:

366.14 inches at Cherrapunji, India, July, 1861 (over 150 inches fell in 5 consecutive days in August, 1841).

States: 71.54 inches at Helen Mine, California, January, 1909.

average annual precipitation (calendar year):

460 inches at Mt. Waialeale, Island of Kauai, Hawaiian Islands, 1912-1958; inches at Cherrapunji, India, 74 year average.

States: 150.73 inches at Wynoochee, Washington, 13 year average.

average annual precipitation (calendar year):

0.02 inch at Arica, Chile, 43 year average.

States: 1.66 inches at Greenland Ranch, California, 44 year average. (Bagdad, ornia holds the U. S. record for the longest period with no measurable rain,

ays, Oct. 3, 1912 to Nov. 8, 1914.)

Other U. S. precipitation extremes:

Wettest state: Louisiana, 65 year annual average of 57.34 inches.

Driest state: Nevada, 66 year annual average of 8.60 inches. (Average annual precipitation for the United States is about 29 inches.)

Heavy U. S. snowfall records:

Greatest average annual: 575.1 inches at Paradise Ranger Station, Rainier National Park, Washington.

Greatest amount in one season: 1000.3 inches at Paradise Ranger Station, Rainier National Park, Washington, 1955/56.

Greatest amount in a calendar month: 390 inches at Tamarack, California, Jan., 1921.

Greatest in 24 hours: 76 inches at Silver Lake, Colorado, April 14-15, 1921. —storm, April 12-15, produced highest known rates in U. S. for durations up to 3 hours: 95 inches in 48 hours; 98 inches in 72 hours; 100 inches in 85 hours.)

In the New York City blizzard of December 26, 1947, 25.8 inches of snow fell in 20 hours, almost 5 inches more than fell in the blizzard of March, 1888.

Largest hailstone definitely recorded in U. S.: 1½ pounds by weight, at Potter, Nebraska, July 6, 1928.

Ancient Empires

The *Egyptian* and *Babylonian* empires, Near Eastern civilizations whose cultures mark the beginning of written history, had their origins in the nebulous period of ancient history prior to the year 4000 B.C. They developed rapidly in the fertile river valleys of the Nile in Egypt and the Tigris-Euphrates in Mesopotamia after the discovery of metals and the invention of writing. Their governments were all-powerful, with the people subjugated and without political rights. The Egyptians regarded their king as a god. In Babylon, the ruler was a priest-king, earthly representative of the gods. Nevertheless, these Near East cultures made great contributions to the eternal march of man; they advanced the ways of making and doing things, produced the earliest literature, developed the principles of law (the code of Hammurabi, Babylonian king of the 18th [or possibly 17th] century B.C., the oldest code of law) and science.

The influence of Babylon and Egypt was felt in the rise of the Semitic tribes of Syria, the Hittites in Asia Minor, and the people of the Aegean region. Between the years 1200 and 800 B.C., the small Syrian states grew to great power and then were overwhelmed by the great empire of the *Assyrians*, the warlike peasants of the Tigris valley, who took the lessons learned from the Babylonians and spread that culture over their domains. The Assyrians, like the Egyptians and the Babylonians, in turn fell under the power of the *Persian* kings in the century between 600 and 500 B.C. By 525 B.C., the Persian Empire extended from India to Egypt.

The lessons learned by these early Near Eastern civilizations were transmitted to *Greece*, which developed its illustrious empire in the Aegean region, after the inhabitants of the island of Crete had absorbed the Egyptian culture. The mainland Greeks overthrew the Cretans and in turn were succeeded by the Doric Greeks, who spread their culture across the Aegean, the Asia Minor coast, and into the Mediterranean and Black Sea regions. The char-

acteristic Greek political institution was the city-state, first ruled by kings and then by often temporary monarchical tyrants, and finally by the participation of citizens. Literature and the arts flourished, and by the 5th century B.C., when Athens became the great city of the Greeks, drama had risen to full maturity with the great tragedies of Sophocles and Euripides and the comedies of Aristophanes. Architecture and art advanced apace. The Greeks, learning much from their Egyptian teachers, produced such superb buildings as the Parthenon and created amazingly beautiful statues through the use of living models. Religion, which was closely linked with art, also flourished, as did the development of philosophy, under Socrates, Plato and Aristotle. Wars weakened the city-states, and they fell to Alexander the Great in the 4th century B.C.

Last among the great ancient empires was the *Roman*, which developed in Italy and gained control over the Mediterranean region after absorbing the culture of Greece and combining with it new principles of law and art and teaching a new learning to the West. The development of the Roman civilization began about 510 or 509 B.C., when the peoples on the peninsula of Italy freed themselves from the rule of the Etruscans. The Romans, with a republican form of government, speedily conquered Italy and the Mediterranean region, and the Roman government became men of great wealth, corrupting the city-state system and making a graft-ridden machine of exploitation. The failure of the government to check the self-seeking influence brought on a revolution which resulted eventually in the rise of Julius Caesar to dictatorship in 46 B.C. Caesar's murder in the Senate at Rome was followed in 27 B.C. by the establishment of the one-man rule of Augustus over the Roman Empire. Legal practices were developed and became the foundations of modern law. This great ancient civilization began to crumble in the 3rd century A.D.

Languages of the World

(spoken natively by 5,000,000 or more people)

	Number speaking	Language	Number speaking
Indian: including Quéchuá and 750 other languages and (Ethiopia)	15,000,000	Bisayan, Ilocano, Javanese, Madurese, Malay, Malagasy, Sundanese, Tagalog	105,000,000
se (Indo-China)	20,000,000	Iranian: including Baluchi, Kurdish, Persian, Pushtu	26,500,000
including Swahili, Zulu (India; Pakistan)	65,000,000	Italian	50,000,000
frica)	45,000,000	Japanese	90,000,000
(India; Pakistan)	70,000,000	Javanese	41,000,000
ialects (N. Africa)	6,000,000	Kanarese (India)	14,000,000
India)	37,000,000	Korean	30,000,000
(Philippines)	9,000,000	Lahnda (India; Pakistan)	13,000,000
n	7,000,000	Madurese (Indonesia)	6,500,000
(Spain)	13,000,000	Malay (Indonesia)	14,000,000
including Mandarin, these and others	6,000,000	Malayalam (India)	14,000,000
: including Somali (pia)	475,000,000	Marathi (India)	27,000,000
n: including Kanarese, alam, Tamil, Telugu	7,000,000	Munda (India)	5,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	8,500,000	Oriya (India)	13,000,000
(Belgium)	265,000,000	Persian	12,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	6,400,000	Polish	30,000,000
(Belgium)	21,500,000	Portuguese	63,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	5,000,000	Punjabi (India; Pakistan)	22,000,000
(Belgium)	65,000,000	Pushtu (Afghanistan; Pakistan)	8,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	90,000,000	Rajasthani (India; Pakistan)	17,000,000
(Belgium)	8,000,000	Rumanian	16,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	16,000,000	Russian	200,000,000
(Belgium)	9,000,000	Serbo-Croatian (Yugoslavia)	15,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	150,000,000	Siamese	16,000,000
(Belgium)	13,000,000	Sinhalese (Ceylon)	5,500,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish	415,000,000	Spanish	150,000,000
(Belgium)		Sudanic: including Hausa (Central Africa)	75,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish		Sundanese (Indonesia)	13,000,000
(Belgium)		Swahili (E. Africa)	8,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish		Swedish	7,000,000
(Belgium)		Tagalog (Philippines)	5,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish		Tamil (India)	27,000,000
(Belgium)		Telugu (India)	33,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish		Tibeto-Burman: including Tibetan and Burmese	20,000,000
(Belgium)		Turkic: including Kazakh, Tartar, Turkish, Uzbek	45,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish		Turkish	20,000,000
(Belgium)		Uzbek (U.S.S.R.)	6,000,000
n: including Amharic, ric: including Estonian, Finnish, Hungarian, n, Lappish		Yiddish	5,000,000
(Belgium)			

Universities—Medieval and Modern

ities, in the modern sense of the rang up in the 12th and 13th in response to the resurgence of that preceded the Renaissance in Procedure at the early universities rmal, with students gathering at ce in a city to listen to a pre-teacher. There were no campuses, or endowments. Actually, the iversity" once meant a guild or on; there were, in the medieval universities" of bootmakers, weav- Thus the university of learning lar in organization to the guilds. ents filled the role of apprentices teachers were the masters.

The first European university was that of *Salerno* in the 9th century, when it was known as a school of medicine. By the 11th century, it had become one of the most famous medical schools of Europe.

University of Bologna. Originated about 1200 as student guilds for protection against the merchants and citizens of Bologna who had raised prices of food and lodging. It was famous for its legal scholars. The students were organized into two guilds and exercised a great deal of authority over the administration.

Other Italian universities famed in the Middle Ages included those at *Arezzo*, *Fer-*

rara, Florence, Modena, Naples, Padua, Parma, Perugia, Siena and Vicenza.

University of Paris. Originated between 1150 and 1170 in a cathedral school on the Ile de la Cité, it was later moved to the left (south) bank of the Seine, although it remained under the authority of the chancellor of Notre Dame. It developed into the most famous continental center of learning of its day. Its four principal schools were theology, medicine, law and arts. By the 14th century, the university had some 40 colleges, of which the *Sorbonne* became the most celebrated.

The universities of Paris and Bologna had a marked influence in the subsequent creation of other university centers. About 1167-68 there was a migration of students from Paris to Oxford (founded in the 12th century) and about 1210, from Oxford to Cambridge (also founded in the 12th century).

Other famous universities of the Middle Ages include the *University of Toulouse* (1233), *Salamanca* (1243), *Seville* (1254), *Orléans* (1305), *Valladolid* (1346), *Prague* (1347), *Kraków* (1364), *Vienna* (1364), *Erfurt* (1379), *Heidelberg* (1385), *Cologne* (1388), *Leipzig* (1409), *Rostock* (1419) and *Louvain* (1426).

The Renaissance

The Renaissance gave fresh impetus to the universities of Europe. In France three of importance arose in the 15th century—the *University of Aix* (1409, Provence), the *University of Poitiers* (1431) and the *University of Caen* (1437).

Other French institutions of note that arose in this era were at *Bordeaux* (1441), *Valence* (1452), *Nantes* (1463) and *Bourges* (1465). New European universities were also founded at *Trier* (1450), *Freiburg* (1455), *Ingolstadt* (1459), *Basel* (1460), *Budapest* (1475), *Mainz* (1476), *Uppsala* (1477), *Tübingen* (1477), *Copenhagen* (1479), *Wittenberg* (1502), *Frankfurt on Oder* (1506) and *Coimbra* (1537).

St. Andrews, founded in 1411, was the first university in Scotland. Others were the *University of Glasgow* (1453) and the *University of Aberdeen* (1494). The *College of Edinburgh* was established in the post-Reformation period (1582). In Ireland, *Trinity College* was founded in Dublin in 1591.

Reformation and Post-Reformation

Until the Reformation, most of the institutions of higher learning in Europe were under the tutelage of the Catholic Church. After 1520, however, many established universities declared their independence of the Church. Cromwell's rule brought about new scholastic methods at both Oxford and Cambridge and the es-

tablishment of new colleges thoroughly imbued with Protestantism.

But the first Protestant university that of *Marburg*, Germany, founded 1527. Other Protestant universities: *Königsberg* (1544); *Jena* (1558); *Halle* (1575); *Altdorf* (1575); *Göttingen* (1607); *Strasbourg* (1621); *Halle* (1692).

18th, 19th and 20th Centuries

Among the more famous institutions of this era was *Göttingen* (1736), a school of history became celebrated throughout Europe. Others were: *Erlangen* (1743); *Berlin* (1809); *Lemberg* (1816); *Bonn* (1818); *Helsingfors* (1818); the *National University at Athens* (1837); *Bucharest* (1864); *Tokyo* (1877); *London* (1888) and *Kyoto* (1897).

Among the more famous British universities established in the 19th and 20th centuries were the *University of London* (1828); *Manchester* (1851); the *Manchester University College* in Birmingham, (1881); *Birmingham University* (1900); *Liverpool* (1903); *Leeds* (1904); and the *University of Sheffield* (1905). The *University of Wales* (1893) is composed of the colleges of *Aberystwyth*, *Bangor* and *Cardiff*.

There are many large and important universities in the British Commonwealth. In Canada, the famous *McGill University* in Montreal was founded in 1821. Others: the *University of Toronto* (1827); *Queen's University at Kingston, Ont.* (1841); *University of Quebec* (1852); *Dalhousie*, *Nova Scotia* (1818), and *Montreal University* (1827).

The early universities in India were founded after London University rather than on the Oxford-Cambridge style. They were purely examining institutions. *Cuttack*, *Bombay* and *Madras* universities were founded in 1857 as examining bodies.

In Australia, the state plays an important role in the development of universities. The *University of Melbourne* (1857) has the largest enrollment. Among others are *Adelaide* (1874); *Tasmania* (1890); *Queensland* (1909); *Sydney* (1850) and *Western Australia* (1911).

There are also many well-endowed universities in New Zealand, South Africa and other parts of the Commonwealth.

By 1800, Russia had only three universities—*Vilna* (1578), *Dorpat* (1632) and *Moscow* (1755). Other institutions developed later were the *University of Kharkov* (1804); *Kazan* (1804); *Warsaw*, now *Poland* (originally established 1816, but closed 1832-69); *St. Petersburg* (1819); *St. Vladimir* in *Kiev* (1835); *Odessa* (1865); *Tomsk*, in *Siberia* (1888). The building of universities after the Revolution of 1917 was spurred by the Soviet government.

In China, the growth of universities was hampered by the chaotic state of the government in the 1900's, the recurring wars and the conflict with Japan.

The United States

universities in the United States and in step with the progress of the country. The early settlers brought a hereditary European culture which they transplanted in New England soil. The first university in the country was started as *Harvard College* in 1636, with an endowment totaling 800 pounds. Harvard was to become probably the most famous of the American universities.

College of William and Mary (1693) was the second institution of higher learning established in the colonies. Others during the colonial period (current names only) are: *Yale* (1701); *University of Pennsylvania* (1740); *Princeton* (1747); *Washington and Lee* (1749); *Columbia* (1754); *Brown* (1764); *Rutgers* (1771) and *Dartmouth* (1770).

After the Revolution of 1776, the state tax-supported university was established. The *University of Virginia* (1819) was a notable early example of this type.

Colleges for women grew up in the second quarter of the 19th century. Among these are: *Mt. Holyoke* (1837); *Elmira* (1855); *Vassar* (1861); *Wells* (1868); *Hunter* (1870); *Wellesley* (1870); *Smith* (1871) and *Bryn Mawr* (1880).

In the latter part of the 19th century, universities established by private endowments arose. Typical of these are: *Cornell* (1865), which is also a land-grant institution; *Johns Hopkins* (1876); *Stanford* (1885) and the *University of Chicago* (1890).

Libraries of the World

Europe and Asia

Among the great libraries of the world, the *British Museum* remains in the first rank with more than 6,000,000 printed volumes and 60,000 manuscripts. It contains outstanding treasures as the *Codex Bezae Cantabrigiae* and the *Codex Sinaiticus* of the Bible, the best collection of Greek papyri from Egypt, and vast collections of historical manuscripts of incalculable value. Some 150,000 volumes were destroyed in air raids during World War II, many were replaced later.

One of the finest libraries in the world is the *Bibliothèque Nationale* in Paris, which has approximately 6,000,000 volumes, 155,000 manuscripts, 450,000 medals and coins, 5,000,000 prints and engravings and 400,000 maps.

The *State Library* in Berlin, founded in 1810, was amalgamated in 1947 with the library of the University of Berlin. Before World War II, the State Library had 350,000 volumes; the new combined library had only 1,500,000. The *State Library* at Munich also suffered extensive losses, with some 500,000 volumes destroyed; it now contains about 2,000,000 volumes. It has placed the war losses of all German libraries at between 20 and 25 million volumes.

The *Nationalbibliothek* in Vienna has 1,500,000 volumes, a large collection of incunabula, and a notable theater and picture collection.

Not as large as some of the European libraries, the *Biblioteca Apostolica* in Rome has many priceless manuscripts bequeathed to the Vatican over the centuries, including the *Vaticanus* of the 4th century.

Three of the more important Italian libraries are the *Biblioteca Nazionale* in Naples, with about 1,400,000 volumes; the *Biblioteca Nazionale Centrale* in Florence, with 4,000,000 volumes; and the *Biblioteca Nazionale Centrale* in Rome, with approximately 1,970,000 volumes.

Other large European libraries are the *Bibliothèque Royale* in Brussels (2,000,000 volumes), the *Biblioteca Nacional* in Madrid (1,500,000), the *University Library* at Amsterdam (more than 1,500,000) and the *Royal Library* in Stockholm (900,000). The *Lenin State Library* in Moscow is said to contain 15,000,000 volumes (a figure that probably includes periodicals), besides many collections of valuable historical documents. In Leningrad, the *Public Library* claims 10,000,000 volumes, and the *Library of the Academy of Sciences* some 8,000,000. There are said to be 350,000 libraries in all parts of the U.S.S.R.

In the Far East, the most extensive libraries are found in Japan, although war damage in 1944-45 was severe. In Tokyo, the *National Diet Library* (formerly the *Imperial Library*) was organized in 1948 as a deposit center. With its various branches, it contains an estimated 4,100,000 volumes. The *University Library* at Kyoto has about 1,820,000.

The oldest national libraries in South America are those of Argentina and Brazil, each founded in 1810; the former has about 600,000 volumes, the latter 1,000,000.

The United States and Canada

The earliest libraries in the colonial era were privately owned, although in 1731 Benjamin Franklin projected the first subscription library in Philadelphia. Endowments helped to set up many of the large

libraries, although many of these institutions are now receiving state or municipal support.

The largest library in the United States is the *Library of Congress*, established in 1800 by Congress. In 1957, it contained more than 11,050,000 books and pamphlets, and total collections of over 36,100,000. It extends services to members of Congress and other government departments, and also offers excellent facilities for persons engaged in scholarly research.

The *New York Public Library*, with some 6,400,000 volumes in 1957, is the largest public library in the U. S.

The *American Library Directory* for 1954 listed 12,478 libraries in the U. S., including 6,925 public (with 3,106 branches), 1,374 college and university, 1,923 special and 2,256 other types.

The growth of libraries attached to colleges and universities in the United States

has been phenomenal, and some of university libraries are among the largest in the country. Those with more than 1,000,000 volumes each in 1956 were as follows: Harvard, 6,075,000; Yale, 4,230,000; California, including branches, 3,632,000; Illinois, 3,090,000; Michigan, 2,325,000; Columbia, 2,117,000; Chicago, 1,911,000; Minnesota, 1,791,000; Cornell, 1,740,000; Princeton, 1,500,000; Pennsylvania, 1,400,000; Stanford, 1,309,000; Texas, 1,270,000; Duke, 1,198,000; Northwestern, 1,185,000; Ohio State, 1,150,000; Johns Hopkins, 1,068,000; New York University, 1,041,000; Indiana, 1,000,000.

In Canada, the most important public library is that of Toronto, which has more than 875,000 volumes. Large Canadian university libraries include those at Queen's (280,000), Toronto (609,000), McGill (400,000), and Laval (339,000). The *American Library Directory* for 1954 listed a total of 719 libraries in Canada, including 400 public.

Museums of the World

(For U. S. Museums, see page 359.)

The modern museum originated during the Renaissance, when the revival of interest in the arts and classical antiquity led princes, nobles and humanists to amass specimens of historical value and to house their collections in special buildings or galleries.

Art Museums

The *British Museum*, London, contains some of the most famous historical objects of the world, including the Elgin Marbles and the Rosetta Stone.

Victoria and Albert Museum, London, whose primary object is to furnish examples to illustrate the history of art, emphasizes architecture and sculpture, ceramics, engraving, book production, paintings, textiles, etc. The library is devoted principally to fine and applied arts of all countries.

National Gallery, London, contains a great number of old Masters, including paintings by Da Vinci, Michelangelo, Titoretto, Mantegna, Titian, Bellini, Jan van Eyck, Rubens, Rembrandt, Holbein, Constable and Turner.

Tate Gallery, London, established as part of the National Gallery, was badly damaged during air raids of World War II, but was completely restored by 1949.

Wallace Collection, London, has many objects d'art and curios of French origin, and first-rank canvases and etchings of Italian, Spanish, Flemish, Dutch and English artists.

In France, the most famous gallery is the *Louvre* in Paris, noted for the magnificence of its architecture as well as for

its art collection, which is the largest in the world. Other Parisian museums of importance are *Cluny*, *Rodin*, *Guttmann*, *Carnevet*.

Among the magnificent Italian museums, the *National Museum* at Naples contains one of the best arranged and classified collections. The *Uffizi Gallery* in Florence, founded by the Medicis, has one of the world's largest and best collections of Italian art. Other galleries in Florence are the *Gallery of Modern Art* (Palace) and the *National Museum* (Galleria). Rome has numerous museums including several in the Vatican.

In Berlin, the *National Gallery* was damaged during World War II.

The *Royal Museum of Fine Arts* in Brussels has a fine collection of Flemish and Dutch masters and has many canvases by Rubens, Van Dyck, Rembrandt, Frans Hals and Steen.

The *State Museum* in Amsterdam contains superb works by Rembrandt, Vermeer and others.

Among the notable art museums of other countries are the world-famous *Museo del Prado* in Madrid; the *Tretyakov Gallery* and the *Pushkin State Museum of Fine Arts* in Moscow; the *Hermitage Museum* in Leningrad; and the *National Museum* in Tokyo, famed for its Oriental paintings and objects of art.

Science Museums

The *Ashmolean Museum*, oldest in Britain, was founded in 1683 by O

sity and houses a collection of logical and classical rarities.

The Museum of London has exhibits of scientific instruments and appliances to review the progress of science and the history of invention. Other London museums of science are the *Natural History Museum* (the *British Museum*), the *Imperial War Museum* (exhibits of both World Wars) and the *Geological Museum*.

Liverpool Museums contain valuable collections of natural history and antiquities and are divided into departments of zoology, botany, geology, archeology and geology. The buildings were almost completely destroyed during World War II, although most of the exhibits were saved.

Manchester Museum serves as both municipal and a university museum. *ristol Museum* contains departments of zoology, botany, archeology and antiquities. The *National Museum of Wales* at Cardiff has departments of archeology, botany, geology and zoology.

Edinburgh, Scotland, are the famed *Scottish Museum*, which has collections in art, ethnography, natural history, technology and archeology; and the *National Museum of Antiquities of Scotland*, noted for its coin and manuscript collections.

National Museum in Dublin and the *Ulster Museum* in Belfast have important collections.

Other institutions of continental Europe include the *Natural History Museum* in Paris, the *Museum of Oceanography* in Monaco, the *Natural History Museum* in Berlin, the *State Museum of Geology and Mineralogy* in Leyden (Netherlands), and the *Museum of Natural History* in Stockholm.

Vienna, the *Natural History Museum* in Vienna, the *Hungarian National Museum* in Budapest, the *National Museum* in Prague, and the various science museums in Berne, Geneva, Zurich and Neuchâtel, Switzerland. Most larger cities of the U.S.S.R. have science museums of varying sizes, some specializing in local exhibits of natural history.

Famous science museums in Germany prior to World War II included the various sections of the *Staatliche Museen* in Berlin (re-established after the war) and the museum of ethnography in Hamburg.

In Calcutta is the *Indian Museum*, outstanding for its marine fauna and vertebrate fossils, and in Bombay the *Victoria and Albert Museum*.

In Australia are the *Queensland Museum* and the *Botanic Museum* in Brisbane, the *South Australian Museum* in Adelaide, and the *Australian Museum* in Sydney.

New Zealand contains the *Canterbury Museum*, Christchurch, rich in local fauna, flora and geological items, and a Maori and Polynesian ethnological collection.

In Africa, the *South African Museum*, Capetown, holds general and local history collections and others illustrating anthropology, ethnology and archeology. The *Durban Museum* contains much anthropological material. In Cairo are the notable collections of the *Egyptian Museum*.

Other museums of note include the *Archeological Museums* at Istanbul, the *Tokyo Science Museum*, the *National Museum of Natural History* in Santiago (Chile), the *National Museum* at Rio de Janeiro, and the *Argentine National Museum of Natural Sciences* at Buenos Aires.

Zoological Gardens

North America has more than 30 major zoological gardens in the United States, Canada and Mexico. The *Quebec Zoological Society's* collection is made up of Canadian species. *Toronto* has many exotic species.

The first zoological garden in the United States was established in Philadelphia in 1826. Since that time nearly every large city in the country has acquired a zoo. Among the largest are the celebrated *Brooklyn Zoo* and the *Central Park Zoo* in New York, the *Lincoln Park Zoo* and the *Meadow Brook Zoo* in Chicago, and those in St. Louis, Cincinnati, Detroit, Kansas City and San Diego. The *National Zoological Park* in Washington, D. C., in a beautiful setting of hills, woods and lakes, was established in 1890 by an act of Congress. Some of the U. S. zoos exchange their collections in open-air, barless enclosures. The *Brookfield Zoo* is an example.

In Europe, zoological gardens have long been popular public institutions. The *Jardin d'Acclimatation*, in the Bois de Boulogne, Paris, was established in 1858, and a model zoo at Vincennes was added in 1937 for the Paris Exposition.

Germany had about 20 zoological gardens, many of which were developed in the peacetime years between World Wars I and II. Large zoos were located in Berlin and Frankfurt am Main. In Munich, the animals were grouped according to the continent of their origin. Others were established at Dresden, Leipzig and Cologne. At Stellingen, the *Hagenbeck Garden* became an outstanding show place and distributing center for animals. Smaller collections were established at Düsseldorf, Elberfeld and Hanover. Several German zoos, notably that at Berlin, were destroyed during World War II.

The *Schönbrunn* at Vienna is one of the oldest zoos in Europe. The Budapest zoological gardens house a fine collection of European birds. At Antwerp, the *Royal Zoological Society* founded a large menagerie in 1843. It was seriously damaged by German bombs during World War II.

In the British Isles, the outstanding collection is in the garden of the *London Zoological Society* in Regent's Park. Although this zoo received a number of direct bomb hits in 1940-41 and again in 1944, it remained open throughout World War II; visitors during this period numbered 6,500,000. Manchester and Clifton have smaller gardens, and the one at Edinburgh is famous for its collection of pen-

guins. The *Dublin Zoo* is noted for lions, many of which were born there.

The Amsterdam zoo, with its East-dian collection and its aquarium, and Rotterdam gardens are the two best known in the Netherlands. Built on a high elevation, the *Skansen Zoo* in Stockholm exhibits its north European specimens. The most important gardens in the U.S.S.R. are found in Moscow, where northern as well as exotic species are collected. The *Zoo of Rome* has part of its collection confined in barless pits. At Lisbon there is a zoological garden, and in Madrid a part of the original royal menagerie. A zoo notable for its landscaping was opened at Naples, Italy, in 1952.

Famous Structures

(See also Seven Wonders of the World on page 487.)

Ancient

The *Great Sphinx of Egypt*, one of the wonders of ancient Egyptian architecture, adjoins the pyramids of Giza and has a length of 189 ft. It was built in the 4th dynasty and was used as a temple.

Other Egyptian buildings of note include the *Temples of Karnak and Edfu* and the *Tombs of Beni Hassan*.

The *Parthenon of Greece*, built on the Acropolis in Athens, was the chief temple to the goddess Athena. It was believed to have been completed by 438 B.C. The present temple remained intact until the 5th century A.D. Today, though the Parthenon is in ruins, its majestic proportions are still discernible.

Other great structures of ancient Greece were the *Temples at Paestum* (about 540 and 420 B.C.); the *Temple of Poseidon* (about 460 B.C.); the *Temple of Apollo at Corinth* (about 540 B.C.); the *Temple of Apollo at Bassae* (about 450-420 B.C.); the famous *Erechtheum* atop the Acropolis (about 421-405 B.C.); the *Temple of Athena Nike* at Athens (about 426 B.C.); the *Olympieum at Athens* (174 B.C.-A.D. 131); the *Athenian Treasury* at Delphi (about 515 B.C.); the *Propylaea* of the Acropolis at Athens (437-432 B.C.); the *Theater of Dionysus* at Athens (about 350-325 B.C.); the "House of Cleopatra" at Delos (138 B.C.) and the *Theater at Epidaurus* (about 325 B.C.).

The *Colosseum (Flavian Amphitheater)* of Rome, the largest and most famous of the Roman amphitheaters, was opened for use A.D. 80. Elliptical in shape, it consisted of three stories and an upper gallery, rebuilt in stone in its present form in the third century A.D. Its seats rise in tiers, which in turn are buttressed by concrete vaults and stone piers. It could seat between 40,000 and 50,000 spectators. The

Colosseum was principally used for gladiatorial combat.

The *Pantheon* at Rome, begun by Agrippa in 27 B.C. as a temple, was rebuilt in its present circular form by Hadrian (A.D. 110-25). Literally the Pantheon is intended as a temple of "all the gods." It is remarkable for its perfect preservation today, and it has served continuously for 20 centuries as a place of worship.

Famous Roman arches include the *Arch of Constantine* (about A.D. 315) and the *Arch of Titus* (about A.D. 80).

Later European

St. Mark's Cathedral in Venice (1063-67), one of the great examples of Byzantine architecture, was begun in the 11th century. Partly destroyed by fire in 976, it was later rebuilt as a Byzantine edifice.

Other famous Byzantine examples of architecture are *St. Sophia* in Constantinople (A.D. 532-37); *San Vitale* in Ravenna (542); *St. Paul's Outside the Walls* in Rome (5th century); the *Kremlin* baptistry and marriage church, Moscow (begun 1397); and *St. Lorenzo Outside the Walls* in Rome, begun in 588.

The *Cathedral Group* at Pisa (1003-1173), one of the most celebrated groups of structures built in Romanesque style, consists of the cathedral, the cathedral baptistry, and the *Leaning Tower*. The trio forms a group by itself in the northwest corner of the city. The cathedral and baptistry are built in varicolored marble. The campanile (Leaning Tower) is 108 ft. high and leans more than 16 feet from the perpendicular. There is little reason to believe that the architects intended to have the tower lean.

Other examples of Romanesque architecture include the *Vézelay Abbey* in France (1130); the *Church of Notre-Dame*

at Clermont-Ferrand in France the *Church of San Zeno* (begun at Verona, and *Durham Cathedral* and.

Alhambra (1248-1354), located in a, Spain, is universally esteemed as the greatest masterpieces of Mos-chitecture. Designed as a palace dress for the Moorish monarchs of a, it is surrounded by a heavily wall more than a mile in perim-e location of the Alhambra in the Nevada provides a magnificent set-ths jewel of Moorish Spain.

Tower of London is a group of build-d towers covering 13 acres along th bank of the Thames. The central *Tower*, begun in 1078 during the William the Conqueror, was orig- fortress and royal residence, but er used as a prison. The *Bloody* s associated with Anne Boleyn and otables.

Minster Abbey, in London, was be- 1045 and completed in 1065. It was and enlarged in 1245-50.

Dame de Paris (begun in 1163), he great examples of Gothic archi- is a twin-towered church with a over the crossing and immense fly-resses supporting the masonry at of the church.

famous Gothic structures are s *Cathedral* (12th century); *Sainte e*, Paris (1246-48); *Laon Cathedral*, (1160-1205); *Rheims Cathedral* 1210-50; rebuilt after its almost e destruction in World War I); *Cathedral* (13th-16th centuries); *Cathedral* (1218-69); *Beauvais al* (begun 1247); *Salisbury Cathe-* 20-60); *York Minster* or the *Cathe-* *St. Peter* (begun in the 7th cen- *Milan Cathedral* (begun 1386); and *Cathedral* (13th-19th centuries; amaged in World War II).

uomo (cathedral) in Florence was in 1298, completed by Brunelleschi ecrated in 1436. The oval-shaped omnates the entire structure.

Vatican is a group of buildings in mprising the official residence of e. The *Basilica of St. Peter*, the church in the Christian world, was n 1450. The *Sistine Chapel*, begun is noted for the art masterpieces elangelo, Botticelli and others. The of the *Savior* (known as *St. John*) is the first-ranking Catholic in the world, for it is the cathe-the Pope.

examples of Renaissance archi- are the *Palazzo Riccardi*, the *Pa-tti* and the *Palazzo Strozzi* in Flor-e *Farnese Palace* in Rome; *Palazzo* (completed about 1550) in Venice;

the *Escorial* (1563-93) near Madrid; the *Town Hall* of Seville (1527-32); the *Louvre*, Paris; the *Château* at Blois, France; *St. Paul's Cathedral*, London (1675-1710; badly damaged in World War II); the *Ecole Militaire*, Paris (1752); the *Pazzi Chapel*, Florence, designed by Brunelleschi (1429); the *Palace of Fontainebleau* and the *Château de Chambord* in France.

The *Palace of Versailles*, containing the famous Hall of Mirrors, was built during the reign of Louis XIV and served as the royal palace until 1793.

Outstanding European buildings of the 18th and 19th centuries are the *Superga* at Turin, the *Hôtel-Dieu* in Lyon, the *Belvedere Palace* at Vienna, the *Royal Palace* of Stockholm, the *Opera House* of Paris (1863-75); the *Bank of England*, the *British Museum*, the *University of London* and the *Houses of Parliament*, all in London; the *Panthéon*, the *Church of the Madeleine*, the *Bourse* and the *Palais de Justice* in Paris.

The *Eiffel Tower*, in Paris, was built for the Exposition of 1889 by Alexandre Eiffel. It is 984 ft. high.

Asiatic and African

The *Taj Mahal* (1632-50), at Agra, India, built by Shah Jahan as a tomb for his wife, is considered by some as the most perfect example of the Mogul style and by others as the most beautiful building in the world. Four slim white minarets flank the building, which is topped by a white dome; the entire structure is of marble.

Other examples of Indian architecture are the temples at Benares and Tanjore.

Among famed Moslem edifices are the *Dome of the Rock* or *Mosque of Omar*, Jerusalem (A.D. 691); the *Citadel* (1166), and the *Tombs of the Mamelukes* (15th century), in Cairo; the *Tomb of Humayun* in Delhi; the *Blue Mosque* (1468) at Tabriz and the *Tamerlane Mausoleum* at Samar-kand.

Angkor Vat, outside the city of Angkor Thom, Cambodia, is one of the most beautiful examples of Cambodian or Khmer architecture. The sanctuary was built during the 12th century.

Great Wall of China (228 B.C.?), designed specifically as a defense against nomadic tribes, has numerous large watch towers which could be called buildings. It was erected by Emperor Ch'in Shih Huang Ti and is 1,400 miles long. Built mainly of earth and stone, it varies in height between 18 and 30 feet.

Typical of Chinese architecture are the pagodas or temple towers. Among some of the better known pagodas are the *Great Pagoda of the Wild Geese* at Sian (founded in 652); *Nan t'a* (11th century) at Fang Shan; the *Pagoda of Sung Yueh Ssu* (A.D. 523) at Sung Shan, Honan.

Other well-known Chinese buildings are the *Drum Tower* (1273), the *Three Great Halls* in the Purple Forbidden City (1627), *Buddha's Perfume Tower* (19th century), the *Porcelain Pagoda* and the *Summer Palace*, all at Peiping.

United States

Rockefeller Center, in New York City, extends from 5th to 6th Aves. between 48th and 52nd Sts. (and halfway to 7th Ave. between 50th and 51st Sts.). It occupies 14 ac. and has 16 buildings.

Grant's Tomb, at Riverside Dr. near 122nd St. in New York City, contains the bodies of Ulysses S. Grant and his wife. It was completed in 1897.

The Cathedral of St. John the Divine, at Cathedral Pkwy. and Amsterdam Ave. in New York City, was begun in 1892 but

is not yet completed. When complete, will be the largest Gothic cathedral in world: 601 ft. long, 146 ft. wide at nave, 320 ft. wide at the transept.

St. Patrick's Cathedral, at 5th Ave. 50th St. in New York City, has a seating capacity of 4,500. The nave was opened 1877; the cathedral was dedicated in 1878.

Lincoln Memorial, in Washington, was dedicated in 1922. It has 36 columns (the number of states in 1865), each 35 ft. high. The main chamber contains statue of Lincoln.

Independence Hall, in Philadelphia, the scene of the signing of the Declaration of Independence and the drawing of the U. S. Constitution. It was built between 1732-41 as the State House. Liberty Bell is on the first floor.

Great Dams of the World

Reservoir capacity, thousands of acre feet	Name	Location	Maximum height, feet	Date completed
31,142	Hoover	Colorado River, Ariz.-Nev.	726	1936
28,040	Glen Canyon	Colorado River, Arizona	700	1963
n.a.	Kariba	Zambesi River, Rhodesia	420	1959
24,500	Garrison	Missouri River, N. Dak.	210	1924
19,600	Oahe	Missouri River, S. Dak.	230	1926
19,412	Fort Peck	Missouri River, Mont.	250	1922
9,402	Grand Coulee	Columbia River, Wash.	550	1938
6,200	Fort Randall	Missouri River, S. Dak.	150	1926
6,100	Kentucky	Tennessee River, Ky.	160	1926
6,089	Wolf Creek	Cumberland River, Ky.	242	1926
5,825	Denison	Red River, Okla.-Tex.	165	1926
5,407	Bull Shoals	White River, Ark.	278	1926
5,000	Presidente Alemán	Rio Tonto, Mex.	200	1926
4,500	Shasta	Sacramento River, Calif.	602	1923
4,085	Falcon	Rio Grande, Tex.-Mex.	128	1923
4,060	Aswan	Nile River, Egypt	174	1923
3,468	Hungry Horse	Flathead, S. Fk., Mont.	564	1923
3,263	Lázaro Cárdenas (El Palmito)	Nazas River, Mex.	295	1923
3,000	Salt Springs	North Fork, Mokelumne River, Calif.	345	1923
2,567	Norris	Clinch River, Tenn.	265	1923
2,500	Trinity	Trinity River, California	537	1923
2,432	Alvaro Obregón (Oviachic)	Yaqui River, Sonora, Mex.	187	1923
2,300	Saluda	Saluda River, S. C.	208	1923
2,207	Elephant Butte	Rio Grande, N. Mex.	301	1923
2,092	Center Hill	Caney Fork River, Tenn.	240	1923
2,051	Canyon Ferry	Missouri River, Mont.	225	1923
1,983	Norfork	North Fork River, Ark.	230	1923
1,980	Chelsea	Gatineau River, Canada	100	1923
1,951	Marshall Ford (Mansfield)	Colorado River, Tex.	278	1923
520	Friant	San Joaquin River, California	319	1923
493	Anderson Ranch	Boise River, Idaho	456	1923
456	Shoshone	Shoshone Canyon, Wyoming	329	1923
286	Arrowrock	Boise River, Idaho	350	1923
n.a.	Vaiont	Italy	840	1923
n.a.	Mauvoisin	Dranse River, Switzerland	780	1923
n.a.	Grand Dixence	Dixence River, Switzerland	584†	1923
n.a.	Bhakra	India	680	1923
n.a.	Brownlee	Snake River, Idaho-Oregon	400	1923

* Under construction in 1959. † Initial stage of 3 stages. NOTE: n.a. indicates data not available.

Notable Modern Bridges

Name	Location	Type*	Year completed
GOLDEN GATE	San Francisco	S	1937
MACKINAC STRAITS	Michigan	S	1957
GEORGE WASHINGTON	New York City	S	1931
TACOMA NARROWS	Tacoma, Wash.	S	1950
TRANSBAY	San Francisco	S	1936
BRONX-WHITESTONE	New York City	S	1939
DELAWARE MEMORIAL	Near Wilmington, Del.	S	1951
WALT WHITMAN	South Philadelphia, Pa.	S	1957
AMBASSADOR	Detroit, Mich.	S	1929
QUEBEC	Near Quebec, Canada	C	1917
DELAWARE RIVER	Philadelphia, Pa.	S	1926
FORTH	Firth of Forth, Scotland	C	1889
KILL VAN KULL	Bayonne, N. J.	SA	1931
SYDNEY HARBOR	Sydney, Australia	SA	1932
BEAR MOUNTAIN	Peekskill, N. Y.	S	1924
CHESAPEAKE BAY	Near Annapolis, Md.	S	1952
WILLIAMSBURG	New York City	S	1903
BROOKLYN	New York City	S	1883
LIONS GATE	Vancouver, Canada	S	1939
MID-HUDSON	Poughkeepsie, N. Y.	S	1930
HOWRAH	Calcutta, India	C	1943
MANHATTAN	New York City	S	1909
ANGUS L. MACDONALD	Halifax, N. S., Canada	S	1954
TRANSBAY	Oakland, Calif.	C	1936
TRIBOROUGH	New York City	S	1936
COLOGNE-RODENKIRCHEN	Germany	S	1954
TAPPAN ZEE	Nyack, N. Y.	C	1956
ST. JOHNS	Portland, Oreg.	S	1931
LONGVIEW	Longview, Wash.	C	1930
MT. HOPE	Near Bristol, R. I.	S	1929
QUEENSBORO	New York City	C	1909
FLORIANÓPOLIS	Florianópolis, Brazil	S	1926
CARQUINEZ STRAIT	Near San Francisco	C	1927
MONTREAL HARBOR	Montreal, Canada	C	1930
DEER ISLE	Deer Isle, Me.	S	1939
RICHMOND-SAN RAFAEL	San Francisco Bay	C	1956
CINCINNATI	Cincinnati, Ohio	S	1867
COOPER RIVER	Charleston, S. C.	C	1929
NAGASAKI	Japan	SA	1955
COLOGNE-MÜLHEIM	Germany	S	1951
WHEELING	Wheeling, W. Va.	S	1849
HELL GATE	New York City	SA	1917
EAST ST. LOUIS	East St. Louis, Ill.	C	1950
RAINBOW	Niagara Falls, N. Y.	SA	1941
GRAND MERE	Quebec, Canada	S	1928
DUISBURG	Germany	S	1954
PEACE RIVER	Alaska Highway	S	1943
STORY	Queensland, Australia	C	1940
NATCHEZ	Natchez, Miss.	C	1940
BLUE WATER	Port Huron, Mich.	C	1938
SANDO	Sando, Sweden	CA	1943
SUNSHINE SKYWAY	St. Petersburg, Fla.	C	1954
SAVA RIVER	Belgrade, Yugoslavia	CG	1956
DUBUQUE	Dubuque, Iowa	CT	1943
KINGSTON-RHINECLIFF	Hudson River, N. Y.	CT	1956
THOUSAND ISLANDS	Alexandria Bay, N. Y.	S	1938
RIP VAN WINKLE	Catskill, N. Y.	C	1935
HENRY HUDSON	New York City	SA	1936

S—Suspension. SA—Steel Arch. CA—Concrete Arch. CT—Continuous Truss. CG—Con-

THE UNITED NATIONS

Its Major Cases and Actions

(For new U. N. developments see Headline Stories listed in Table of Contents.)

IRAN

Iran presented the first case before the Security Council on Jan. 19, 1946, demanding an end to Russian "interference" in Azerbaijan province, which Russia had brought under its control through a puppet government. Iran also demanded that Russia keep her promise to withdraw all occupation troops by Mar. 2. The Council kept the matter on the agenda. Russia withdrew her troops May 6.

GREECE

On Dec. 3, 1946, Greece complained to the Security Council that Communist-led rebels in northern Greece were being aided by Albania, Bulgaria and Yugoslavia. The Council named an investigating committee, which reported May 23, 1947, that those 3 nations were guilty. A Russian veto of July 29 prevented the Council's acceptance of the report. In Sept. 1948, the U. N. Balkan Commission, which continued to watch developments, again condemned the 3 nations for continuing aid to the Greek rebels. However, 3 months previously, on June 28, 1948, Marshal Tito's Yugoslavia had broken with Moscow. Thereafter, the Greek Communist-led rebellion faded out.

ATOMIC ENERGY CONTROL

On Dec. 31, 1946, a U. N. commission of 11 nations recommended the "Baruch plan" sponsored by the U. S. for international control and inspection. Only Russia dissented. In June 1947, she submitted a vastly different control plan, limiting international inspection so greatly that the secret making of atomic bombs could not be discovered. On May 17, 1948, the U. N. commission voted (9-2) to suspend work on international atomic control, blaming Russia for the deadlock. A Russian veto of June 22 prevented the Security Council from approving the majority-approved control plan. The topic then went to the General Assembly, which, on Nov. 4, 1948, adopted (40-6) the U. S.-sponsored plan; but nothing could be done to put it into effect because of Soviet-bloc opposition.

PALESTINE

A General Assembly special session met Apr. 28, 1947, at the request of Great Britain to consider Palestine. An 11-nation investigating committee recommended Aug. 31 that Britain give up control and that an Arab and a Jewish state be established. This partition plan was approved by the

Assembly in Nov. 1947, but proved impossible to enforce.

Britain ceased to govern Palestine May 14, 1948. Israel proclaimed her independence and was attacked by 5 neighboring Arab nations. The U. N. made 6 appeals to both sides to stop the war; the 4th brought about a truce from June 11 to July 9. Intermittent fighting took place thereafter. Count Folke Bernadotte, U. N. mediator, was murdered Sept. 29 near Jerusalem. He was succeeded by Ralph J. Bunche.

Israel signed an armistice with Egypt Feb. 24, 1949, and with Jordan on Mar. 3. On May 11, the U. N. voted (37-12) to admit Israel as the 59th member.

INDONESIA

On July 30, 1947, Australia called the Security Council's attention to the fighting between the Netherlands and the Indonesian Republic. The Council, on Aug. 1, ordered both sides to cease hostilities. Good Offices Commission was sent to Indonesia, and it effected a truce Jan. 17, 1948. In Dec. 1948, the Dutch attacked Jakarta, then the Indonesian capital, and the Council again issued a cease-fire. Dutch troops were withdrawn from Jakarta in July 1949. Indonesia then peacefully achieved independence from the Netherlands.

INDIA-PAKISTAN

On Jan. 2, 1948, India appealed to the U. N. to stop alleged aggression by Pakistan. Fighting had broken out over the province of Kashmir. The Security Council set up a commission, which proposed that Kashmir's future be determined by a plebiscite. The Council agreed on Apr. 21, but both sides raised objections. Early in 1949, the U. N. commission succeeded in obtaining a truce; and, on Mar. 14, 1950, the Council substituted a mediator, who was to seek demilitarization of the areas of Kashmir held by India and Pakistan and then try for a plebiscite. Two mediators

RUSSIAN BOYCOTT

Soviet Delegate Malik walked out of the Security Council on Jan. 13, 1950, because it had refused (6-3) Russia's demand that Nationalist China be replaced in the Council by Communist China. The boycott ended on Aug. 1. Again the Council voted (8-0) to refuse membership to Communist China.

KOREA

Russia occupied the northern half of Korea after World War II, and the U. S. occupied the southern half below the 38th parallel. The understanding was that the occupying powers would set up an independent republic to govern the entire country. Russia refused to co-operate. The U. S. then referred the problem to the United Nations, and the General Assembly voted on Nov. 5, 1947, to send a commission to Korea to set up a free government. Russia, however, boycotted the commission and refused to allow it to enter North Korea. The commission therefore supervised free elections in South Korea and assisted in setting up the Republic of Korea with its capital at Seoul.

HUNGARY

Shaken by student demonstrations, riots in Hungary in Oct. 1956, took the proportions of rebellion. The Communist government called for Soviet help, and Russian tanks rolled into Budapest on Oct. 4. The Communists sought to appease the rebellious people by putting in as a replacement a man, Imre Nagy, who had been expelled from the party as a "Titoist."

The U. S. promised to throw off Russian domination, and by Nov. 1, Russian tanks and troops had withdrawn from Budapest. On Nov. 4, however, the Russian tanks reappeared in force, shooting freely and killing freely. The Russians set up a new government headed by János Kádár.

The General Assembly on Nov. 4, in a special session, called on Russia to get its troops out of Hungary "without delay."

Over the ensuing 6 weeks, the General Assembly passed 4 more resolutions about the Soviet crushing of Hungary.

On Dec. 12, 1956, the General Assembly passed a resolution of outright condemnation of Russia for violation of the Charter by the U. S. in depriving Hungary of its liberty and independence. The vote was 55 to 0, which constituted a world-wide indictment.

The General Assembly decided in Jan. 1957 to name a five-man committee to investigate from outside Hungary. On it were representatives of Denmark, Tunisia, Sri Lanka, Ceylon and Australia.

The committee heard testimony from 111 Hungarians, mainly refugees, in Europe and America. It reported unanimously on Nov. 10, 1957, that the Hungarian uprising had been a spontaneous revolt of the people and that the crushing of the revolt had cost Russian troops had cost between 10,000 and 3,000 lives.

Meanwhile, people had begun fleeing Communist Hungary on a mass scale.

almost unprecedented. By the end of April 1957, some 175,000 Hungarians had sought asylum in Austria.

SUEZ

On Oct. 29, 1956, Israeli armed forces launched a major attack into the Gaza Strip and into Egypt's Sinai Desert territory.

An emergency special session of the U. N. General Assembly adopted on the night of Nov. 1-2, by a vote of 64 in favor, 5 against, 6 abstentions, a United States resolution calling upon all parties involved in hostilities in the area to agree to an immediate cease-fire. By that time, Britain and France were involved in the fighting.

Heeding the General Assembly call, Britain and France announced on Nov. 3 that they would stop military action.

By direction of the General Assembly, a United Nations Emergency Force was established to keep the peace. The first units landed at Ismailia, midway point on the Suez Canal, on Nov. 11, 1956.

On Feb. 21, Israel agreed to pull out its last troops if the U. N. Emergency Force stationed peace-keeping troops on the Aqaba Gulf and in the Gaza Strip. The U. N. Emergency Force troops were so stationed, and they became the first uniformed peace-preserving unit in the history of the U. N.

The nations which contributed troops were Brazil, Canada, Colombia, Denmark, Finland, India, Norway, Sweden and Yugoslavia.

LEBANON

In July, 1958, the United States responded to a plea for help from the little country of Lebanon at the eastern end of the Mediterranean, which had been in the throes of insurrection allegedly aided from its neighbor Syria, lately affiliated with Egypt in the new United Arab Republic. At Lebanon's request, U. S. Marines were landed there. Almost simultaneously, nearby Jordan requested and received British troops to safeguard the pro-West regime.

The U. N. already had a team of about 130 observers in Lebanon. In the Security Council, the Soviet Union now cast its 84th and 85th vetoes to kill resolutions (supported by the West) designed to strengthen U. N. forces in the Mideast.

The General Assembly was summoned into a rare emergency session which opened Aug. 8. A unanimous resolution directed Secretary-General Dag Hammarskjöld to go to the Middle East and see what arrangements could be made to restore stability and facilitate withdrawal of U. S. and British troops.

United Nations Headquarters

The first regular session of the General Assembly held at Central Hall, Westminster, London, voted that Interim Headquarters of the Organization should be located in New York. From London the U. N. moved to Hunter College in the Bronx. In August 1946, an Interim Headquarters was set up at Lake Success on Long Island, in a part of the Sperry Gyroscope Co.'s plant. The New York City building at Flushing Meadows, site of the 1939 World's Fair, was converted for the use of the General Assembly. The search for a permanent home ended in December 1946, when the General Assembly accepted

an offer from John D. Rockefeller, Jr., \$8,500,000 for the purchase of the present Headquarters site—an 18-acre tract alongside Manhattan's East River. The U. S. Government loaned the U. N. \$65,000,000 interest free, which is being repaid in annual installments.

Architectural plans drawn up by the international Board of Design were approved by the Assembly, and construction began in September 1948. By mid-1950 the 39-story Secretariat Building was ready for occupancy, and in the spring of 1951 "United Nations, New York" became the Organization's permanent address.

United Nations Costs

U. N. regular budget appropriations for 1960 were approved at \$63,149,700. Member states contribute on a scale determined by

the General Assembly. In 1959, the U. S. paid 32.51% of the cost, the U.S.S.R. 13.62% and the U. K. paid 7.78%.

Elected Member States Serving Terms on U. N. Councils

(For changes see Headline Stories listed in Table of Contents)

Security Council

Jan. 1946-Dec. 1946: Egypt; Mexico; Netherlands.
Jan. 1946-Dec. 1947: Australia; Brazil; Poland.
Jan. 1947-Dec. 1948: Belgium; Colombia; Syria.
Jan. 1948-Dec. 1949: Argentina; Canada; Ukrainian S.S.R.
Jan. 1949-Dec. 1950: Cuba; Egypt; Norway.
Jan. 1950-Dec. 1951: Ecuador; India; Yugoslavia.
Jan. 1951-Dec. 1952: Brazil; Netherlands; Turkey.
Jan. 1952-Dec. 1953: Chile; Greece; Pakistan.
Jan. 1953-Dec. 1954: Colombia; Denmark; Lebanon.
Jan. 1954-Dec. 1955: Brazil; New Zealand; Turkey.
Jan. 1955-Dec. 1956: Belgium, Iran, Peru.
Jan. 1956-Dec. 1957: Australia; Cuba; Yugoslavia. Yugoslavia resigned at the end of 1956 and was replaced by the Philippines.
Jan. 1957-Dec. 1958: Colombia; Iraq; Sweden.
Jan. 1958-Dec. 1959: Canada; Japan; Panamá.
Jan. 1959-Dec. 1960: Argentina; Italy; Tunisia.
Jan. 1960-Dec. 1961: Ceylon, Ecuador and Poland. (Turkey will replace Poland in 1961.)

Economic and Social Council

Jan. 1946-Dec. 1946: Colombia; Greece; Lebanon; Ukrainian S.S.R.; U. S.; Yugoslavia.
Jan. 1946-Dec. 1947: Cuba; Czechoslovakia; India; Norway; United Kingdom; U.S.S.R.
Jan. 1946-Dec. 1948: Belgium (resigned 1947 and replaced by Netherlands); Canada; Chile; China; France; Peru.
Jan. 1947-Dec. 1949: Byelorussian S.S.R.; Lebanon; New Zealand; Turkey; U. S.; Venezuela.
Jan. 1948-Dec. 1950: Australia; Brazil; Denmark; Poland; United Kingdom; U.S.S.R.
Jan. 1949-Dec. 1951: Belgium; Chile; China; France; India; Peru.

Jan. 1950-Dec. 1952: Canada; Czechoslovakia; Iran; Mexico; Pakistan; U. S.
Jan. 1951-Dec. 1953: Philippines; Poland; Sweden; United Kingdom; U.S.S.R.
Jan. 1952-Dec. 1954: Argentina; Belgium; China; Cuba; Egypt; France.
Jan. 1953-Dec. 1955: Australia; India; Tunisia; U. S.; Venezuela; Yugoslavia.
Jan. 1954-Dec. 1956: Czechoslovakia; Ecuador; Norway; Pakistan; United Kingdom; U.S.S.R.
Jan. 1955-Dec. 1957: Argentina; China; Egypt; Rep.; France; Netherlands.
Jan. 1956-Dec. 1958: Brazil; Canada; Greece; Indonesia; U. S.; Yugoslavia.
Jan. 1957-Dec. 1959: Finland; Mexico; Pakistan; Poland; U.S.S.R.; United Kingdom.
Jan. 1958-Dec. 1960: Chile; China; Costa Rica; France; Netherlands; Sudan.
Jan. 1959-Dec. 1961: Afghanistan; Bulgaria; New Zealand; Spain; U. S.; Venezuela.
Jan. 1960-Dec. 1962: Brazil, Denmark, Japan, Poland, U.S.S.R. and United Kingdom.

Trusteeship Council

Non-Administrative Members

Jan. 1947-Dec. 1949: Iraq; Mexico.
Jan. 1948-Dec. 1950: Costa Rica (resigned Sept. 1949 and replaced by Dominican Republic); Philippines.
Jan. 1950-Dec. 1952: Argentina (resigned at effect of Jan. 1, 1952 and replaced by El Salvador); Iraq.
Jan. 1951-Dec. 1953: Dominican Republic; Thailand.
Jan. 1953-Dec. 1955: El Salvador; Syria.
Jan. 1954-Dec. 1956: Haiti; India.
Jan. 1956-Dec. 1958: Burma; Guatemala; India.
Jan. 1957-Dec. 1959: Haiti; India.
Jan. 1959-Dec. 1961: Burma; Paraguay; Arab Republic.
Jan. 1960-Dec. 1962: Bolivia and India.

Principal Organs of the United Nations

(For changes see Headline Stories listed in Table of Contents)

SECRETARIAT

Secretary-General

Dag Hammarskjöld, of Sweden, Apr. 10, 1946, to the present.

Former Secretary-General

Trygve Lie, of Norway, Feb. 1, 1946, to Apr. 10, 1953.

GENERAL ASSEMBLY

The General Assembly is composed of all member states. It does most of its work through committees, of which there are 4 types: procedural, standing and ad hoc.

Main Committees

Committee (Political and Security, including the regulation of armaments).
Political Committee.

Committee (Economic and Financial).

Committee (Social, Humanitarian and Cultural).

Committee (Trusteeship, including Self-Governing Territories).

Committee (Administrative and Budgetary).

Committee (Legal).

Presidents of the General Assembly

Henri Spaak, of Belgium, 1946, First Session.

João Aranha, of Brazil, 1947, First Session and Second Regular Session.

José Arce, of Argentina, 1948, Second Regular Session.

Robert V. Evatt, of Australia, 1948, Third Session.

Francisco P. Romulo, of the Philippines, 1949, Fourth Session.

Mohammed Mossadeq, of Iran, 1950, Fifth Session.

Adolfo López Mateos, of Mexico, 1951, Sixth Session.

W. L. B. Pearson, of Canada, 1952, Seventh Session.

Jaya Lakshmi Pandit, of India, 1953, Eighth Session.

W. J. van Kleffens, of the Netherlands, Ninth Session.

Patricio Aylwin, of Chile, 1955, Tenth Session.

Andrés Bello, of Chile, Nov., 1956, Eleventh Session and Second Emergency Special Session.

Wan Waithayakon, of Thailand, Twelfth Session.

Norman Macdonald, of New Zealand, 1957-58, Thirteenth Session and Third Emergency Special Session.

Youssef Bechraoui, of Lebanon, 1958-1959, Fourteenth Session.

Andrés Bello, of Peru, 1959, Fifteenth Session.

SECURITY COUNCIL

The Security Council is composed of 5 permanent members—China, France, the U.S.S.R., the United Kingdom and the U. S. There are 6 nonpermanent members serving 2-year terms.

The Military Staff Committee is composed of the Chiefs of Staff of the 5 permanent members or their representatives; the Disarmament Commission, established by the General Assembly under the Security Council, had the following membership during 1958: Argentina, Australia, Belgium, Brazil, Burma, Canada, China, Colombia, Czechoslovakia, France, India, Iraq, Italy, Japan, Mexico, Norway, Panamá, Poland, Sweden, Tunisia, the U.S.S.R., the United Arab Republic, the United Kingdom, the U. S. and Yugoslavia.

At its 13th session in 1958 and its 14th session in 1959, the General Assembly decided that the Disarmament Commission would, for 1959 and 1960 respectively, and on an ad hoc basis, consist of all U. N. members.

ECONOMIC AND SOCIAL COUNCIL

The Economic and Social Council is composed of 18 nonpermanent members serving 3-year terms.

Functional Commissions

Statistical Commission.

Population Commission.

Social Commission.

Commission on Human Rights.

Commission on the Status of Women.

Commission on Narcotic Drugs.

Commission on International Commodity Trade.

Regional Economic Commissions

Economic Commission for Europe.

Economic Commission for Asia and the Far East.

Economic Commission for Latin America.

Economic Commission for Africa.

TRUSTEESHIP COUNCIL

The Trusteeship Council is composed of 14 members: seven members—Australia, Belgium, France, Italy, New Zealand, the United Kingdom, and the U. S.—which administer trust territories; China and the U.S.S.R., other permanent members of the Security Council which do not administer trust territories; and 5 other members elected by the General Assembly serving 3-year terms. This arrangement ensures that the total number of Council members is equally divided between those U. N. members which administer trust territories and those which do not.

As of July 1960, Trusteeship Agreements concerned the following territories (the

Administering Authority in each case is in italics):

Nauru—*Australia (on behalf of Australia, New Zealand and the United Kingdom).*

New Guinea—*Australia.*

Ruanda-Urundi—*Belgium.*

Western Samoa—*New Zealand.*

Cameroons, Tanganyika—*United Kingdom.*

The Territory of the Pacific Islands—composed of the former Japanese-mandated islands of the Marshalls, Marianas (with the exception of Guam) and Carolines—is a strategic Trust Territory administered by the U. S.

The General Assembly decided at its Fourth Session in 1949 that former Italian Somaliland was to be placed under the Trusteeship System for ten years. Italy became the Administering Authority in 1950.

Three trust territories became independent in 1960: the French Cameroons, Jan. 1; French Togoland, Apr. 27; and Italian Somaliland, July 1. Plebiscites will be held in the British Cameroons in 1961 to determine its future, and Western Samoan independence has been set tentatively for the end of 1961. British Togoland, a former trust territory, became independent Mar. 7, 1957, joining the Gold Coast, a former British colony, to become the new state of Ghana.

INTL. COURT OF JUSTICE

(The Court is composed of 15* judges, who serve for a 9-year term and may be re-elected. Expiration dates of terms are shown in parentheses. All terms expire February 5 of the year designated. The seat of the Court is The Hague, Netherlands.)

President: Helge Klaestad, Norway (1961)
Vice President: Muhammad Zafrulla Khan, Pakistan (1961)

Ricardo J. Alfaro, Panama (1964)
E. C. Armand-Ugón, Uruguay (1961)
Abdel Hamid Badawi, U.A.R. (1967)
Jules Basdevant, France (1964)
Roberto Córdova, Mexico (1964)
Green H. Hackworth, U. S. (1961)
F. I. Kojevnikov, U.S.S.R. (1961)
Hersch Lauterpacht, U. K. (1964)
L. M. Moreno Quintana, Argentina (1964)
Sir Percy Spender, Australia (1967)
Jean Spiropoulos, Greece (1967)
W. K. Wellington Koo, China (1967)
Bohdan Winlarski, Poland (1967)

* One judge died in 1960.

Agencies of the United Nations

International Atomic Energy Agency (IAEA)

Established: Statute for IAEA, approved on October 26, 1956 at a conference held at U. N. Headquarters, New York, came into force on July 29, 1957. The Agency,

while not a specialized agency, is under the aegis of the U. N.

Purposes: To promote the peaceful use of atomic energy, and to ensure that assistance provided by it or at its request or under its supervision or control is used in such a way as to further military purpose.

Headquarters: Vienna, Austria.

Specialized Agencies

International Labour Organisation (ILO)

Established: Apr. 11, 1919, when constitution was adopted as Part XIII of Treaty of Versailles.

Purposes: To contribute to establishment of lasting peace by promoting social justice; to improve, through international action, labor conditions and living standards; to promote economic and social stability.

Headquarters: Geneva, Switzerland.

Food and Agriculture Organization (FAO)

United Nations (FAO)
Established: Oct. 16, 1945, when constitution became effective.

Purposes: To raise nutrition levels, improve living standards; to secure improvement in production and distribution of food and agricultural products.

Headquarters: Viale delle Terme Diocleziane, Rome, Italy.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Established: Nov. 4, 1946, when ratification to constitution deposited in depositary government of acceptance with government of United Kingdom.

Purposes: To promote collaboration among nations through education, science and culture in order to further justice, rule of law and human rights and to eliminate distinctions of race, sex, language or religion.

Headquarters: 19 Ave. Kléber, Paris, France.

World Health Organization (WHO)

Established: Apr. 7, 1948, when 26 members of the U. N. had accepted its constitution adopted July 22, 1946, by International Health Conference in New York.

Purposes: To aid attainment by all peoples of the world of highest possible level of health.

Headquarters: Palais des Nations, Geneva, Switzerland.

International Bank for Reconstruction and Development (Bank)

Established: Dec. 27, 1945, when Agreement drawn up at Bretton Woods Conference in July, 1944, came into force. Began operations June 25, 1946.

Purposes: To assist in reconstruction and development of economies of member nations by making loans directly and promoting private foreign investment; to promote

ed growth of international trade.
Headquarters: 1818 H St., NW, Washing-
D. C.

International Finance Corporation (IFC)

Established: Charter of IFC came into
force July 20, 1956. Although IFC is
not with the International Bank,
a separate legal entity and its funds
are entirely separate from those of the
IB. However, membership in the Cor-
poration is open only to Bank members.
Purposes: Its objective is to further
economic development by encouraging the
growth of productive private enterprise in
underdeveloped countries, particularly in the
developed areas. It is empowered to
invest in productive private enterprises in
conjunction with private investors, and
to guarantee government of repay-
ment cases where sufficient private cap-
ital is not available on reasonable terms;
to serve as a clearing house to bring
together investment opportunities, private
capital, both foreign and domestic, and
expert management.

Headquarters: 1818 H St., NW, Washing-
D. C.

International Monetary Fund (Fund)

Established: Dec. 27, 1945, when Articles
of Agreement drawn up at Bretton Woods
came into force. It began operations on March 1, 1947.
Purposes: To promote international
monetary co-operation and expansion of
international trade; to promote exchange
of currencies; to assist in establishment of mul-
tilateral system of payments in respect of
international transactions between members.

Headquarters: 1818 H St., NW, Washing-
D. C.

International Civil Aviation Organization (ICAO)

Established: April 4, 1947, after working
as a provisional organization since August
1945.

Purposes: To help governments along in
international air routes contribute toward
regular flights in the jet age by list-
ing improvements and cooperating
international aviation officials in putting
them into effect. They have, for example,
been designing new airports and dem-
onstrating new safety equipment. They are
concerned with international financ-
ing services too expensive for some of
underdeveloped nations to maintain alone,
as well as helping less developed countries
overcome some of their
economic handicaps. This agency also pre-
pares future developments and helps
develop uniform practices and standards
in international aviation.

Headquarters: Montreal.

Universal Postal Union (UPU)

Established: July 1, 1875.

Purposes: Reciprocal exchange of corre-
spondence by uniform procedures by all
UPU members. It also helps governments
modernize and speed up mailing proce-
dures.

Headquarters: Berne, Switzerland.

International Telecommunication Union (ITU)

Established: 1865.

Purposes: To extend technical assistance
to help members keep up with present day
telecommunication needs, to standardize
communications equipment and proce-
dures, and to lower costs. It also works
for orderly sharing of radio frequencies,
and makes studies and recommendations
to benefit its members.

Headquarters: Geneva, Switzerland.

World Meteorological Organization (WMO)

Established: April 4, 1951, succeeding the
International Meteorological Organization,
a non-governmental organization founded
in 1878.

Purposes: The international exchange of
weather reports and maximum standard-
ization of observations. It also helps under-
developed countries set up weather services
for their own economic needs; seeks to fill
gaps in observing stations; promotes mete-
orological investigations affecting jet air-
craft, satellites, energy resources, etc.

Headquarters: Geneva, Switzerland.

Inter-Governmental Maritime Consultative Organization (IMCO)

Established: January 13, 1959.

Purposes: To give advisory and consulta-
tive help to promote international coopera-
tion in maritime navigation, and to en-
courage the highest standards of safety
and navigation. It has started efforts to
bring about a uniform system of measur-
ing ship tonnage; systems now vary widely
in different parts of the world. Other ac-
tivities include cooperation with other
U. N. agencies in relation to matters affect-
ing the maritime field.

Headquarters: London.

General Agreement on Tariffs and Trade (GATT)

Established: January 1, 1948.

Purposes: An International Trade Or-
ganization (ITO) was planned when the
U. N. Agencies were first set up. Although
this agency has not materialized, some of
its objectives have been embodied in an
international commercial treaty, the Gen-
eral Agreement on Tariffs and Trade
(GATT). This provides a code of conduct
for international trade and seeks to help
raise living standards and promote eco-
nomic growth.

Headquarters: Geneva, Switzerland.

Principal Officers of the Secretariat as of May 1960*

(For changes see Headline Stories listed in Table of Contents)

Andrew W. Cordier (U. S.), Executive Assistant to the Secretary-General.
 Constantin A. Stavropoulos (Greece), Legal Counsel.
 Bruce R. Turner (New Zealand), Controller.
 W. A. B. Hamilton (U. K.), Director of Personnel.
 Ralph J. Bunche (U. S.), Under-Secretary for Special Political Affairs.
 C. V. Narasimhan (India), Under-Secretary for Special Political Affairs, Associate Managing Director of the U. N. Special Fund.
 Philippe de Seynes (France), Under-Secretary for Economic and Social Affairs.
 Roberto M. Heurtematte (Panamá), Commissioner for Technical Assistance.
 Paul Hoffman (U. S.), Managing Director of the U. N. Special Fund.
 Sakari Tuomioja (Finland), Executive Secretary, Economic Commission for Europe.
 U Nyun (Burma), Executive Secretary, Economic Commission for Asia and the Far East.
 * Office of Under-Secretary for Political and Security Council Affairs is vacant.

Raúl Prebisch (Argentina), Executive Secretary, Economic Commission for Latin America.
 Mekki Abbas (Sudan), Executive Secretary, Economic Commission for Africa.
 Dragoslav Protitch (Yugoslavia), Under-Secretary for Trusteeship and Information from Non-Self-Governing Territories.
 Alfred G. Katzin (Union of South Africa), Acting Head, Office of Public Information.
 Victor A. Hoo (China), Under-Secretary for Conference Services.
 David B. Vaughan (U. S.), Director of General Services.
 Maurice Pate (U. S.), Executive Director of the U. N. Children's Fund (UNICEF).
 David Owen (U. K.), Executive Chairman of the Technical Assistance Board.
 P. P. Spinelli (Italy), Director of the European Office in Geneva.
 Auguste R. Lindt (Switzerland), U. N. Commissioner for Refugees (UNHCR).
 John H. Davis (U. S.), Director, U. N. Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

Security Council

Representatives (as of April 1960)

Argentina: Dr. Mario Amadeo.
 Ceylon: Sir Claude Corea.
 China: Dr. Tingfu F. Tsiang.
 Ecuador: Dr. José A. Correa.
 France: Armand Berard.
 Italy: Egidio Ortona.
 Poland: Jerzy Michalowski.
 Tunisia: Mongi Slim.
 U.S.S.R.: Arkady A. Sobolev.
 United Kingdom: Sir Pierson Dixon.
 United States: Henry Cabot Lodge.

Economic and Social Council

Representatives (28th session, June-July 1959)

Afghanistan: Abdul Rahman Pazhwak.
 Brazil: Eurico Penteado.
 Bulgaria: Yordan Tchobanov.
 Chile: Daniel Schweitzer.
 China: Cheng Paonan.
 Costa Rica: Dr. Gonsalo Ortiz.
 Denmark: Aage Hesselund-Jensen.
 Finland: Ralph Enckell.
 France: Roger Auboin.
 Japan: Koto Matsudaira.
 Mexico: Daniel Cosío Villegas.

Netherlands: C. W. A. Schurmann.
 New Zealand: Foss Shanahan.
 Poland: Jerzy Michalowski.
 Spain: Don José Felix de Lequerica.
 Sudan: Omar Abdel Hamid Adeel.
 U.S.S.R.: A. A. Sobolev.
 United Kingdom: A. A. Dudley.
 United States: Christopher H. Phillips.
 Venezuela: Carlos Sosa-Rodriguez.

Trusteeship Council

Representatives (25th session, Jan.-Feb. 1960)

Australia: J. D. L. Hood.
 Belgium: Robert Scheyven.
 Bolivia: Carlos Salamanca.
 Burma: U Thant.
 China: Chiping H. C. Kiang.
 France: Jacques Kosciuszko-Morizet.
 Haiti: Max H. Dorsinville.
 India: C. S. Jha.
 Italy: Girolamo Vitelli.
 New Zealand: Foss Shanahan.
 Paraguay: Pacifico Montero de Vargas.
 U.S.S.R.: Valentin I. Oberemko.
 United Arab Republic: Omar Loutfi.
 United Kingdom: G. K. Caston.
 United States: Mason Sears.

Security Council Vetoes

As of September 1960, ninety-one proposals brought before the United Nations Security Council had been defeated because of vetoes by permanent members. The U.S.S.R. cast eighty-six of these vetoes,

the United Kingdom two, China one, France four (two in conjunction with United Kingdom, one with the U. S. and one alone). The United States had no vetoes.

Delegation Heads to the United Nations

(For changes and additions see Headline Stories listed in Table of Contents)

Members Represented at Headquarters*

stan: Abdul Rahman Pazhwak.
 e: Reis Malile.
 a: Dr. Mario Amadeo.
 a: James Plimsoll.
 Dr. Franz Matsch.
 : Walter Loridan.
 Prof. Marcial Tamayo.
 Cyro de Freitas-Valle.
 : Yordan Tchobanov.
 U Thant.
 sian S.S.R.: Feodosy N. Gryaznov.
 la: Nong Kimny.
 C. S. A. Ritchie.
 Sir Claude Corea.
 aniel Schweitzer.
 Dr. Tingfu F. Tsiang.
 a: Dr. Alfonso Araujo.
 ca: Dr. Gonzalo Ortiz.
 r. Manuel Bisbe.
 ovakia: Karel Kurka.
 k: Aage Hesselund-Jensen.
 an Rep.: Dr. Enrique de Marchena.
 José A. Correa.
 lor: Dr. Miguel Rafael Urquila.
 : (Vacant).
 on of Malaya: Dato Nik Ahmed
 Ralph Enckell.
 Armand Berard.
 Alex Quaison Sackey.
 Christian X. Palamas.
 la: Dr. Alberto Herrarte.
 Diallo Telli.
 rlet R. Auguste.
 s: Francisco Milla Bermudez.
 Peter Mod.
 Thor Thors.
 S. Jha.
 : (Vacant).
 Mehdi Vakil.
 an M. Pachachi (acting).
 Frederick H. Boland.
 ent representatives to U. N. as of April 1960. Not all nations maintain permanent missions.

Israel: Michel Comay.
 Italy: Egidio Ortona.
 Japan: Dr. Koto Matsudaira.
 Jordan: Abdul Monem Rifa'i.
 Laos: (Vacant).
 Lebanon: Georges Hakim.
 Liberia: Charles T. O. King.
 Libya: Dr. Mohieddine Fekini.
 Luxemburg: Georges Heisbourg.
 Mexico: Dr. Luis Padilla Nervo.
 Morocco: El Mehdi Ben Aboud.
 Nepal: Rishikesh Shaha.
 Netherlands: C. W. A. Schurmann.
 New Zealand: Foss Shanahan.
 Nicaragua: Dr. Guillermo Sevilla-Sacasa.
 Norway: Sivert A. Nielsen.
 Pakistan: Prince Aly Khan.
 Panamá: Dr. Jorge E. Illueca.
 Paraguay: Dr. Pacifico Montero de Vargas.
 Peru: Carlos Mackehenie.
 Philippines: Francisco A. Delgado.
 Poland: Jerzy Michalowski.
 Portugal: Dr. Vasco Vieira Garin.
 Romania: Silvio Brucan.
 Saudi Arabia: Ahmad Shukairy.
 Spain: Don José Felix de Lequerica.
 Sudan: Sayed Omar Abdel Hamid Adeel.
 Sweden: Mrs. Agda Rösset.
 Thailand: Prince Wan Waithayakon. (Absent.)
 Tunisia: Mongi Slim.
 Turkey: Seyfullah Esin.
 Ukrainian S.S.R.: Petr P. Udovichenko.
 Union of So. Africa: Bernardus G. Fourie.
 U.S.S.R.: Arkady A. Sobolev.
 United Arab Republic: Omar Loutfi.
 United Kingdom: Sir Pierson Dixon.
 United States: Henry Cabot Lodge.
 Uruguay: Prof. Enrique Rodriguez Fabregat.
 Venezuela: Dr. Carlos Sosa-Rodriguez.
 Yemen: Mohamed Kamil Abdul Rahim.
 Yugoslavia: Dobrivoje Vidic.

Permanent Mission to U. N.

abot Lodge; Ambassador Extraor-
 and Plenipotentiary, Permanent
 ntative to U. N.
 Wadsworth; Ambassador Extraor-
 and Plenipotentiary, Deputy Repre-
 e to U. N.
 Barco; Minister, Deputy Represen-
 on Security Council, Counsellor of
 er H. Phillips; Representative on
 ic and Social Council.
 Armour, Jr.; Principal Liaison Offi-
 george Bacon; Adviser, Trusteeship
 Thomas A. Bartlett; Adviser, Polit-
 Security Affairs.
 Bender, Jr.; Senior Adviser, Legal
 ernational Organization Affairs.
 W. Carpenter; Director, News Serv-
 . Cook; Deputy Counsellor of Mis-
 nior Adviser, Political and Security

Miss Dorothy Crook (Mrs. C. S. Hazard) Pub-
 lic Affairs Officer.
 Seymour M. Finger, Senior Adviser, Economic
 and Social Affairs.
 Zachary P. Geaneas, Chief Administrative
 Officer.

U. S. Delegation to the 14th Session of the General Assembly

Representatives

Henry Cabot Lodge	George Meany
James G. Fulton	Walter S. Robertson
Clement J. Zablocki	

Alternate Representatives

Charles W. Anderson, Jr.	Virgil N. Hancher
Erle Cocke, Jr.	Mrs. Oswald B. Lord
	Harold Riegelman

The Secretary of State, Christian Herter, served as Senior Representative, *ex officio*, during his presence at the session. (Lodge served during Herter's absence.)

CHARTER OF THE UNITED NATIONS

WE the peoples of the United Nations determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

To reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and

To establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

To promote social progress and better standards of life in larger freedom, and for these ends

To practice tolerance and live together in peace with one another as good neighbors, and

To unite our strength to maintain international peace and security, and

To insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

To employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.

Accordingly, our respective Governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

CHAPTER I

Purposes and Principles

Article 1

The purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian

character, and in promoting and encouraging respect for human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion and

4. To be a center for harmonizing actions of nations in the attainment of these common ends.

Article 2

The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles:

1. The Organization is based on the principle of the sovereign equality of all Members.

2. All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, in any other manner inconsistent with the Purposes of the United Nations.

5. All Members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The Organization shall ensure that states which are not Members of the United Nations act in accordance with these principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

CHAPTER II

Membership

Article 3

The original Members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or having previously

laration by United Nations of Janu-
1942, sign the present Charter and
in accordance with Article 110.

Article 4

membership in the United Nations is
all other peace-loving states which
the obligations contained in the
Charter and, in the judgment of
anization, are able and willing to
at these obligations.

the admission of any such state to
ship in the United Nations will be
by a decision of the General As-
upon the recommendation of the
Council.

Article 5

member of the United Nations against
preventive or enforcement action
n taken by the Security Council
suspended from the exercise of the
and privileges of membership by
neral Assembly upon the recom-
on of the Security Council. The
of these rights and privileges may
red by the Security Council.

Article 6

member of the United Nations which
sistently violated the Principles
d in the present Charter may be
from the Organization by the Gen-
embly upon the recommendation
ecurity Council.

CHAPTER III

Organs

Article 7

re are established as the principal
of the United Nations; a General
y, a Security Council, an Economic
al Council, a Trusteeship Council,
national Court of Justice, and a
at.

h subsidiary organs as may be
ecessary may be established in ac-
with the present Charter.

Article 8

United Nations shall place no re-
s on the eligibility of men and
o participate in any capacity and
nditions of equality in its prin-
d subsidiary organs.

CHAPTER IV

The General Assembly Composition

Article 9

General Assembly shall consist of
members of the United Nations.

2. Each Member shall have not more
than five representatives in the General
Assembly.

Functions and Powers

Article 10

The General Assembly may discuss any
questions or any matters within the scope
of the present Charter or relating to the
powers and functions of any organs pro-
vided for in the present Charter, and,
except as provided in Article 12, may make
recommendations to the Members of the
United Nations or to the Security Council
or to both on any such questions or mat-
ters.

Article 11

1. The General Assembly may consider
the general principles of cooperation in
the maintenance of international peace
and security, including the principles gov-
erning disarmament and the regulation of
armaments, and may make recommenda-
tions with regard to such principles to
the Members or to the Security Council or
to both.

2. The General Assembly may discuss
any questions relating to the maintenance
of international peace and security brought
before it by any Member of the United Na-
tions, or by the Security Council, or by a
state which is not a Member of the United
Nations, in accordance with Article 35, par-
agraph 2, and, except as provided in Arti-
cle 12, may make recommendations with
regard to any such question to the state
or states concerned or to the Security
Council or to both. Any such question on
which action is necessary shall be referred
to the Security Council by the General
Assembly either before or after discussion.

3. The General Assembly may call the
attention of the Security Council to situa-
tions which are likely to endanger inter-
national peace and security.

4. The powers of the General Assembly
set forth in this Article shall not limit the
general scope of Article 10.

Article 12

1. While the Security Council is exercis-
ing in respect of any dispute or situation
the functions assigned to it in the present
Charter, the General Assembly shall not
make any recommendations with regard to
that dispute or situation unless the Se-
curity Council so requests.

2. The Secretary-General, with the con-
sent of the Security Council, shall notify
the General Assembly at each session of
any matters relative to the maintenance of
international peace and security which are
being dealt with by the Security Council
and shall similarly notify the General As-
sembly, or the Members of the United Na-

tions if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

Article 13

1. The General Assembly shall initiate studies and make recommendations for the purpose of:

(a) promoting international cooperation in the political field and encouraging the progressive development of international law and its codification;

(b) promoting international cooperation in the economic, social, cultural, educational, and health fields, and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in paragraph 1 (b) above are set forth in Chapters IX and X.

Article 14

Subject to the provisions of Article 12, the General Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations, including situations resulting from a violation of the provisions of the present Charter setting forth the Purposes and Principles of the United Nations.

Article 15

1. The General Assembly shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has decided upon or taken to maintain international peace and security.

2. The General Assembly shall receive and consider reports from the other organs of the United Nations.

Article 16

The General Assembly shall perform such functions with respect to the international trusteeship system as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas not designated as strategic.

Article 17

1. The General Assembly shall consider and approve the budget of the Organization.

2. The expenses of the Organization shall be borne by the Members as apportioned by the General Assembly.

3. The General Assembly shall consider and approve any financial and budgetary arrangements with specialized agencies re-

ferred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

Voting

Article 18

1. Each member of the General Assembly shall have one vote.

2. Decisions of the General Assembly on important questions shall be made by a two-thirds majority of the members present and voting. These questions shall include: recommendations with respect to the maintenance of international peace and security, the election of the permanent members of the Security Council, the election of the members of the Economic and Social Council, the election of members of the Trusteeship Council in accordance with paragraph 1 (c) of Article 86, the admission of new Members to the United Nations, the suspension of rights and privileges of membership, the expulsion of Members, questions relating to the operation of the trusteeship system, and budgetary questions.

3. Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds majority, shall be made by a simple majority of the members present and voting.

Article 19

A Member of the United Nations which is in arrears in the payment of its financial contributions to the Organization shall have no vote in the General Assembly until the amount of its arrears equals or exceeds the amount of the contributions from it for the preceding two full years. The General Assembly may, nevertheless, permit such a Member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the Member.

Procedure

Article 20

The General Assembly shall meet in regular annual sessions and in such special sessions as occasion may require. Sessions shall be convoked by the Secretary-General at the request of the Security Council or of a majority of the Members of the United Nations.

Article 21

The General Assembly shall adopt its own rules of procedure. It shall elect a President for each session.

Article 22

The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions.

CHAPTER V

The Security Council
Composition

Article 23

The Security Council shall consist of Members of the United Nations. The Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America shall be permanent members of the Security Council. The General Assembly shall elect the other Members of the United Nations to be non-permanent members of the Security Council, due regard being paid, in the first instance to the equitable distribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the Organization, and also to the geographical distribution.

Three non-permanent members of the Security Council shall be elected for a term of two years. In the first election of non-permanent members, however, only two shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

Each member of the Security Council shall have one representative.

Functions and Powers

Article 24

In order to insure prompt and effective action by the United Nations, its Members confer on the Security Council primary responsibility for the maintenance of international peace and security, and authorize it in carrying out its duties under this Charter to exercise the Security Council's responsibility on their behalf.

In discharging these duties the Security Council shall act in accordance with the Purposes and Principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, and XII.

The Security Council shall submit annual reports, when necessary, special reports and such other reports as the General Assembly may request for its consideration.

Article 25

The Members of the United Nations shall accept and carry out the decisions of the Security Council in accordance with the Charter.

Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for the world's human and economic

resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee referred to in Article 47, plans to be submitted to the Members of the United Nations for the establishment of a system for the regulation of armaments.

Voting

Article 27

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of seven members.

3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of seven members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI, and under paragraph 3 of Article 52, a party to a dispute shall abstain from voting.

Procedure

Article 28

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the Organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the Organization as in its judgment will best facilitate its work.

Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its President.

Article 31

Any Member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that Member are specially affected.

Article 32

Any Member of the United Nations which is not a member of the Security

Council or any state which is not a Member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a Member of the United Nations.

CHAPTER VI

Pacific Settlement of Disputes

Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

Article 35

1. Any Member of the United Nations may bring any dispute, or any situation of the nature referred to in Article 34 to the attention of the Security Council or of the General Assembly.

2. A state which is not a Member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this Article the Security Council shall also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the Statute of the Court.

Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 to 37, the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

CHAPTER VII

Action with Respect to Threats to Peace, Breaches of the Peace, and Acts of Aggression

Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.

Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or advisable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of the failure to comply with such provisional measures.

Article 41

The Security Council may decide what measures not involving the use of force are to be employed to give effect to its decisions.

decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic and of rail, sea, air, postal, telegraph, radio, and other means of communication, and the severance of diplomatic relations.

Article 42

The Security Council shall consider the measures provided for in Article 41 as inadequate or have proved to be inadequate, it may take such action by sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other measures by air, sea, or land forces of the Members of the United Nations.

Article 43

Members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council on its call and in accordance with the agreement or agreements, armed forces, assistance, and facilities, including bases and airfields, necessary for the purpose of maintaining international peace and security.

The agreement or agreements shall specify the numbers and types of forces, the degree of readiness and general location of the forces, and the nature of the facilities and services to be provided.

The agreement or agreements shall be concluded as soon as possible on the basis of the recommendations of the Security Council. They shall be concluded between the Security Council and Members or between the Security Council and groups of Members and shall be subject to ratification by the Members concerned in accordance with their respective constitutional processes.

Article 44

When the Security Council has decided upon a course of action, it shall, before calling upon a Member not represented on it to provide armed forces in fulfillment of the obligations assumed under Article 43, invite that Member and, if the Member so desires, to participate in the decisions of the Security Council concerning the employment of armed forces of that Member's armed forces.

Article 45

In order to enable the United Nations to carry out military measures, Members shall maintain immediately available national contingents for combined inter-organizational action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits laid

down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any Member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that Member in its work.

3. The Military Staff Committee shall be responsible under the Security Council for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with appropriate regional agencies, may establish regional subcommittees.

Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the Members of the United Nations or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the Members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

Article 49

The Members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a

Member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

CHAPTER VIII

Regional Arrangements

Article 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the Purposes and Principles of the United Nations.

2. The Members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.

3. The Security Council shall encourage the development of pacific settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.

4. This Article in no way impairs the application of Articles 34 and 35.

Article 53

1. The Security Council shall, where appropriate, utilize such regional arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as defined in par-

agraph 2 of this Article, provided for pursuant to Article 107 or in regional arrangements directed against renewal of aggressive policy on the part of any state, until such time as the Organization may, on request of the Governments concerned, be charged with the responsibility for preventing further aggression by that state.

2. The term enemy state as used in paragraph 1 of this Article applies to any state which during the Second World War has been an enemy of any signatory of the present Charter.

Article 54

The Security Council shall at all times be kept fully informed of activities undertaken or in contemplation under regional arrangements or by regional agencies for the maintenance of international peace and security.

CHAPTER IX

International Economic and Social Cooperation

Article 55

With a view to the creation of conditions of stability and well-being which are essential for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

(a) higher standards of living, full employment, and conditions of economic, social progress and development;

(b) solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and

(c) universal respect for, and observance of, human rights and fundamental freedoms for all without distinction of race, sex, language, or religion.

Article 56

All Members pledge themselves to joint and separate action in cooperation with the Organization for the achievement of the purposes set forth in Article 55.

Article 57

1. The various specialized agencies established by intergovernmental agreement and having wide international responsibilities, as defined in their instruments, in economic, social, cultural, educational, health, and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.

2. Such agencies thus brought into relationship with the United Nations

er referred to as specialized agen-

Article 58

organization shall make recommen-
for the coordination of the poli-
activities of the specialized agen-

Article 59

organization shall, where appropri-
ate negotiations among the states
d for the creation of any new
ed agencies required for the ac-
ment of the purposes set forth
e 55.

Article 60

sibility for the discharge of the
s of the Organization set forth in
ter shall be vested in the General
and, under the authority of the
Assembly, in the Economic and
ouncil, which shall have for this
he powers set forth in Chapter X.

CHAPTER X

Economic and Social Council

Composition

Article 61

Economic and Social Council
sist of eighteen Members of the
Nations elected by the General

ect to the provisions of para-
six members of the Economic and
ouncil shall be elected each year
n of three years. A retiring mem-
be eligible for immediate re-

ne first election, eighteen mem-
ne Economic and Social Council
hosen. The term of office of six
so chosen shall expire at the end
ar, and of six other members at
f two years, in accordance with
ents made by the General As-

member of the Economic and
ouncil shall have one representa-

Functions and Powers

Article 62

Economic and Social Council may
nitiate studies and reports with
international economic, social,
educational, health, and related
nd may make recommendations
ect to any such matters to the
sembly, to the Members of the
ations, and to the specialized
ncerned.

ay make recommendations for
e of promoting respect for, and
of, human rights and funda-
edoms for all.

3. It may prepare draft conventions for
submission to the General Assembly, with
respect to matters falling within its com-
petence.

4. It may call, in accordance with the
rules prescribed by the United Nations,
international conferences on matters fall-
ing within its competence.

Article 63

1. The Economic and Social Council may
enter into agreements with any of the
agencies referred to in Article 57, defining
the terms on which the agency concerned
shall be brought into relationship with
the United Nations. Such agreements shall
be subject to approval by the General As-
sembly.

2. It may coordinate the activities of the
specialized agencies through consultation
with and recommendations to such agen-
cies and through recommendations to the
General Assembly and to the Members of
the United Nations.

Article 64

1. The Economic and Social Council may
take appropriate steps to obtain regular
reports from the specialized agencies. It
may make arrangements with the Mem-
bers of the United Nations and with the
specialized agencies to obtain reports on
the steps taken to give effect to its own
recommendations and to recommendations
on matters falling within its competence
made by the General Assembly.

2. It may communicate its observations
on these reports to the General Assembly.

Article 65

The Economic and Social Council may
furnish information to the Security Coun-
cil and shall assist the Security Council
upon its request.

Article 66

1. The Economic and Social Council shall
perform such functions as fall within its
competence in connection with the carry-
ing out of the recommendations of the
General Assembly.

2. It may, with the approval of the Gen-
eral Assembly, perform services at the re-
quest of Members of the United Nations
and at the request of specialized agencies.

3. It shall perform such other functions
as are specified elsewhere in the present
Charter or as may be assigned to it by the
General Assembly.

Voting

Article 67

1. Each member of the Economic and
Social Council shall have one vote.

2. Decisions of the Economic and Social Council shall be made by a majority of the members present and voting.

Procedure

Article 68

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of human rights, and such other commissions as may be required for the performance of its functions.

Article 69

The Economic and Social Council shall invite any Member of the United Nations to participate, without vote, in its deliberations on any matter of particular concern to that Member.

Article 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those of the commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

Article 71

The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations and, where appropriate, with national organizations after consultation with the Member of the United Nations concerned.

Article 72

1. The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its President.

2. The Economic and Social Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

CHAPTER XI

Declaration Regarding Non-Self-Governing Territories

Article 73

Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and ac-

cept as a sacred trust the obligation to promote to the utmost, within the system of international peace and security established by the present Charter, the well-being of the inhabitants of these territories, and, to this end:

(a) to ensure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

(b) to develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;

(c) to further international peace and security;

(d) to promote constructive measures of development, to encourage research to cooperate with one another and, where appropriate, with specialized international bodies with a view to practical achievement of the social, economic, and scientific purposes set forth in this Article; and

(e) to transmit regularly to the Secretary-General for information purposes, subject to such limitation as security and constitutional considerations may require, statistical and other information of a technical nature relating to economic, social, and educational conditions in the territories for which they are respectively responsible other than those territories to which Chapters XII and XIII apply.

Article 74

Members of the United Nations agree that their policy in respect of territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the principle of good-neighborliness, due account being taken of the interests and well-being of the rest of the world, political, economic, and commercial matters.

CHAPTER XII

International Trusteeship System

Article 75

The United Nations shall establish its authority an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements. These territories are hereafter referred to as trust territories.

Article 76

The basic objectives of the trusteeship system, in accordance with the Pur-

United Nations laid down in Article 1 of the present Charter, shall be:

to further international peace and security;

to promote the political, economic, social, and educational advancement of the inhabitants of the trust territories, their progressive development towards self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples, the freely expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;

to encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion, and to encourage the development of the interdependence of the peoples of the world; and

to ensure equal treatment in social, economic, and commercial matters for all Members of the United Nations and for all nationals, and also equal treatment for the latter in the administration of the territory, without prejudice to the attainment of the foregoing objectives and subject to the provisions of Article 80.

Article 77

The trusteeship system shall apply to territories in the following categories which may be placed thereunder by means of trusteeship agreements:

territories now held under mandate; territories which may be detached from enemy states as a result of the Second World War; and

territories voluntarily placed under the system by states responsible for their administration.

It will be a matter for subsequent agreement as to which territories in the foregoing categories will be brought under the trusteeship system and upon what terms.

Article 78

The trusteeship system shall not apply to territories which have become Members of the United Nations, relationship among which shall be based on respect for the principle of sovereign equality.

Article 79

The terms of trusteeship for each territory to be placed under the trusteeship system, including any alteration or amendment, shall be agreed upon by the states parties concerned, including the mandatory power in the case of territories held under mandate by a Member of the United Nations, and shall be approved as provided in Articles 83 and 85.

Article 80

1. Except as may be agreed upon in individual trusteeship agreements, made under Articles 77, 79, and 81, placing each territory under the trusteeship system, and until such agreements have been concluded, nothing in this Chapter shall be construed in or of itself to alter in any manner the rights whatsoever of any states or any peoples or the terms of existing international instruments to which Members of the United Nations may respectively be parties.

2. Paragraph 1 of this Article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of agreements for placing mandated and other territories under the trusteeship system as provided for in Article 77.

Article 81

The trusteeship agreement shall in each case include the terms under which the trust territory will be administered and designate the authority which will exercise the administration of the trust territory. Such authority, hereinafter called the administering authority, may be one or more states or the Organization itself.

Article 82

There may be designated, in any trusteeship agreement, a strategic area or areas which may include part or all of the trust territory to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

Article 83

1. All functions of the United Nations relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the Security Council.

2. The basic objectives set forth in Article 76 shall be applicable to the people of each strategic area.

3. The Security Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the Trusteeship Council to perform those functions of the United Nations under the trusteeship system relating to political, economic, social, and educational matters in the strategic areas.

Article 84

It shall be the duty of the administering authority to ensure that the trust territory shall play its part in the maintenance of international peace and security. To this end the administering authority may make use of volunteer forces, facili-

ties, and assistance from the trust territory in carrying out the obligations towards the Security Council undertaken in this regard by the administering authority, as well as for local defense and the maintenance of law and order within the trust territory.

Article 85

1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.

2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.

CHAPTER XIII

The Trusteeship Council Composition

Article 86

1. The Trusteeship Council shall consist of the following Members of the United Nations:

(a) those Members administering trust territories;

(b) such of those Members mentioned by name in Article 23 as are not administering trust territories; and

(c) as many other Members elected for three-year terms by the General Assembly as may be necessary to ensure that the total number of members of the Trusteeship Council is equally divided between those Members of the United Nations which administer trust territories and those which do not.

2. Each member of the Trusteeship Council shall designate one specially qualified person to represent it therein.

Functions and Powers

Article 87

The General Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

(a) consider reports submitted by the administering authority;

(b) accept petitions and examine them in consultation with the administering authority;

(c) provide for periodic visits to the respective trust territories at times agreed upon with the administering authority; and

(d) take these and other actions in conformity with the terms of the trusteeship agreements.

Article 88

The Trusteeship Council shall form a questionnaire on the political, economic, social, and educational advancement of inhabitants of each trust territory; the administering authority for each territory within the competence of the General Assembly shall make an annual report to the General Assembly upon the basis of such questionnaire.

Voting

Article 89

1. Each member of the Trusteeship Council shall have one vote.

2. Decisions of the Trusteeship Council shall be made by a majority of the members present and voting.

Procedure

Article 90

1. The Trusteeship Council shall make its own rules of procedure, including the method of selecting its President.

2. The Trusteeship Council shall make its own rules of procedure, including the method of selecting its President, which shall include provision for the convening of meetings on the request of a majority of its members.

Article 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

CHAPTER XIV

The International Court of Justice

Article 92

The International Court of Justice shall be the principal judicial organ of the United Nations. It shall function in accordance with the annexed Statute, which is based upon the Statute of the Permanent Court of International Justice and forms an integral part of the present Charter.

Article 93

1. All Members of the United Nations are *ipso facto* parties to the Statute of the International Court of Justice.

2. A state which is not a Member of the United Nations may become a party to the Statute of the International Court of Justice on condition to be determined in each case by the General Assembly upon the recommendation of the Security Council.

Article 94

1. Each Member of the United Nations undertakes to comply with the decisions of the International Court of Justice.

International Court of Justice in any which it is a party.

any party to a case fails to perform obligations incumbent upon it under a judgment rendered by the Court, the party may have recourse to the Security Council, which may, if it deems proper, make recommendations or decide upon measures to be taken to give effect to the judgment.

Article 95

Nothing in the present Charter shall prevent Members of the United Nations from entrusting the solution of their disputes to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

Article 96

The General Assembly or the Security Council may request the International Court of Justice to give an advisory opinion on any legal question.

Other organs of the United Nations and specialized agencies, which may at any time be so authorized by the General Assembly, may also request advisory opinions of the Court on legal questions arising within the scope of their activities.

CHAPTER XV

The Secretariat

Article 97

The Secretariat shall comprise a Secretary-General and such staff as the Organization may require. The Secretary-General shall be appointed by the General Assembly on the recommendation of the Security Council. He shall be the chief administrative officer of the Organization.

Article 98

The Secretary-General shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council, and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The Secretary-General shall make an annual report to the General Assembly on the work of the Organization.

Article 99

The Secretary-General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

Article 100

The performance of their duties the Secretary-General and the staff shall not receive instructions from any government or from any other authority external to the Organization. They shall

refrain from any action which might reflect on their position as international officials responsible only to the Organization.

2. Each Member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary-General and the staff and not to seek to influence them in the discharge of their responsibilities.

Article 101

1. The staff shall be appointed by the Secretary-General under regulations established by the General Assembly.

2. Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other organs of the United Nations. These staffs shall form a part of the Secretariat.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence, and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

CHAPTER XVI

Miscellaneous Provisions

Article 102

1. Every treaty and every international agreement entered into by any Member of the United Nations after the present Charter comes into force shall as soon as possible be registered with the Secretariat and published by it.

2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of paragraph 1 of this Article may invoke that treaty or agreement before any organ of the United Nations.

Article 103

In the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.

Article 104

The Organization shall enjoy in the territory of each of its Members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

Article 105

1. The Organization shall enjoy in the territory of each of its Members such privileges and immunities as are necessary for the fulfillment of its purposes.

2. Representatives of the Members of the United Nations and officials of the Organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the Organization.

3. The General Assembly may make recommendations with a view to determining the details of the application of paragraphs 1 and 2 of this Article or may propose conventions to the Members of the United Nations for this purpose.

CHAPTER XVII

Transitional Security Arrangements

Article 106

Pending the coming into force of such special agreements referred to in Article 43 as in the opinion of the Security Council enable it to begin the exercise of its responsibilities under Article 42, the parties to the Four-Nation Declaration, signed at Moscow, October 30, 1943, and France, shall, in accordance with the provisions of paragraph 5 of that Declaration, consult with one another and, as occasion requires with other Members of the United Nations with a view to such joint action on behalf of the Organization as may be necessary for the purpose of maintaining international peace and security.

Article 107

Nothing in the present Charter shall invalidate or preclude action, in relation to any state which during the Second World War has been an enemy of any signatory to the present Charter, taken or authorized as a result of that war by the Governments having responsibility for such action.

CHAPTER XVIII

Amendments

Article 108

Amendments to the present Charter shall come into force for all Members of the United Nations when they have been adopted by a vote of two-thirds of the members of the General Assembly and ratified in accordance with their respective constitutional processes by two-thirds of the Members of the United Nations, including all the permanent members of the Security Council.

Article 109

1. A General Conference of the Members of the United Nations for the purpose of reviewing the present Charter may be held at a date and place to be fixed by a two-thirds vote of the members of the General Assembly and by a vote of any seven members of the Security Council. Each Member of the United Nations shall have one vote in the conference.

2. Any alteration of the present Charter recommended by a two-thirds vote of the conference shall take effect when ratified in accordance with their respective constitutional processes by two-thirds of the Members of the United Nations, including all the permanent members of the Security Council.

3. If such a conference has not been held before the tenth annual session of the General Assembly following the coming into force of the present Charter, the proposal to call such a conference shall be placed on the agenda of that session of the General Assembly, and the conference shall be held if so decided by a majority vote of the members of the General Assembly and by a vote of any seven members of the Security Council.

CHAPTER XIX

Ratification and Signature

Article 110

1. The present Charter shall be ratified by the signatory states in accordance with their respective constitutional processes.

2. The ratifications shall be deposited with the Government of the United States of America, which shall notify a copy of each ratification to the Secretary-General of the Organization when he has been appointed.

3. The present Charter shall come into force upon the deposit of ratifications by the Republic of China, France, the United Kingdom of Great Britain and Northern Ireland, and the United States of America and by a majority of the other signatory states. A protocol of the ratifications deposited shall thereupon be drawn up by the Government of the United States of America which shall communicate a copy thereof to all the signatory states.

4. The states signatory to the present Charter which ratify it after it has come into force will become original Members of the United Nations on the date of deposit of their respective ratifications.

Article 111

The present Charter, of which the Chinese, French, Russian, English and Spanish texts are equally authentic, shall remain deposited in the archives of the Government of the United States of America. Duly certified copies thereof shall be transmitted by that Government to the Governments of the other signatory states.

IN FAITH WHEREOF the representatives of the Governments of the United Nations have signed the present Charter.

DONE at the city of San Francisco, the twenty-sixth day of June, one thousand nine hundred and forty-five.

U. S. POSTWAR TREATIES

North Atlantic Treaty Organization (NATO)

(Formed: April 4, 1949)

Members: United States, Canada, Iceland, Norway, Great Britain, Netherlands, Denmark, Belgium, Luxembourg, Portugal, France, Italy, Greece, Turkey, West Germany

In 1948, the United States government talks with the signers of the Brussels and Canada concerning the formation of a regional defense treaty in the North Atlantic area. It represented the first important security pact with European nations since the French Alliance of 1778 and the first time in United States history that the United States pledged itself to war in support of allies before the outbreak of hostilities. The U. S. ratified the treaty July 21, 1949.

The United States, acting under Article 1 of the Treaty, began a program of military assistance which at the end of the year 1959 amounted to over \$10 billion. Roughly half of all United States military assistance has gone to members of NATO. However, approximately 85% of NATO's military preparation has come from the European countries themselves.

NATO now united most of the countries of the Atlantic community plus Greece, Turkey, and West Germany, which were added to the original membership. Its organization comprises the top foreign, military, defense, and financial ministers of the member countries. The military responsibilities of NATO are divided into three major commands—SHAPE for Europe, MACV for the Atlantic Ocean area.

Following are key quotations from the North Atlantic Treaty text. (Complete text in *Information Please Almanac*.)

Article 1: "The Parties undertake to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the United Nations."

Article 2: "The Parties . . . will eliminate conflict in their international relations and will encourage economic collaboration between any or all members."

Article 5: "The Parties agree that an armed attack against one or more of them in Europe or North America shall be regarded as an attack against them all; and they agree that, if such an attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51

of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area."

From Article 9: "The Parties hereby establish a council, on which each of them shall be represented, to consider matters concerning the implementation of this Treaty."

U. S. Japanese Treaty

Main provisions of the U. S.-Japanese Security Treaty signed at San Francisco on Sept. 8, 1951:

1. Japan grants and the U. S. accepts the right to dispose of U. S. land, air, and sea forces in and about Japan. Such forces may be utilized to contribute to the maintenance of international peace and security in the Far East and to the security of Japan against armed attack from without, including assistance given at the express request of the Japanese government to put down large scale riots and disturbances in Japan caused through instigation or intervention by an outside power or powers.

2. Japan will not grant without the prior consent of the U. S. any bases or any rights, powers, or authority whatsoever relating to bases, or the right of garrison or maneuver or transit of ground, air, or naval forces of any third power.

3. This treaty shall expire whenever in the opinion of the governments of the U. S. and of Japan, U. N. arrangements or alternate individual or collective dispositions satisfactorily provide for the maintenance of international peace and security in the Japan area.

(For new U. S.-Japanese Treaty, see Headline Stories listed in Table of Contents.)

Southeast Asia Treaty Organization (SEATO)

(Signed: Sept., 1954)

Members: United States, Great Britain, France, Australia, New Zealand, Pakistan, Thailand, Philippines

Weaker than NATO, SEATO does not include rigid provisions for collective defense but states that armed attack on any member would be regarded as a threat to safety of the others. SEATO represents the United States' desire to counterbalance the power of Communist China. Yet three major non-Communist countries—Indonesia, Burma, and India—are not members.

Anzus Treaty (Effective 1952)

Members: Australia, New Zealand, United States

This security treaty involves a commitment less comprehensive than that of NATO and closer to the SEATO obligations. Article 3 stipulates that the parties will consult whenever in the opinion of any of them the territorial integrity, political independence, or security of any of the parties is threatened in the Pacific. Under Article 4, each party recognizes that an armed attack in the Pacific area on any of the parties would be considered dangerous to its own peace and safety, and agrees to act to meet the common danger in accordance with its constitutional processes.

Central Treaty Organization (CENTO) (Formerly Baghdad Pact) (Signed: Nov., 1955)

Members: Turkey, Iran, Great Britain, Pakistan, United States. (Another original member, Iraq, withdrew in Mar., 1959. The U. S. gradually became a member.)

Although it inspired the pact, the U. S. did not become a full member until July 28, 1958, shortly after the revolutionary coup in Iraq, which threatened the collapse of the Baghdad Pact. The pact's purpose continues to be that of providing a defense shield on the northern tier of the Middle East against Soviet penetration. The headquarters were transferred in Oct., 1958, from Baghdad to Ankara, and the name was changed from Baghdad Pact to Central Treaty Organization in Aug., 1959.

Organization of American States (OAS) and the Rio Treaty

In Sept., 1947, eighteen Latin American countries (Nicaragua and Ecuador were excluded) and the United States signed at Rio de Janeiro the Rio Treaty under which all signatories agreed to protect against aggression every state in the Western Hemisphere. In Apr., 1948, all the American nations (twenty-one—Canada not included) joined in the Organization of American States (OAS) to implement the Rio Treaty and form a collective security system.

(For treaties not listed here, see index.)

Western European Integration

Slow steps toward a greater degree of Western European unity were taken after World War II.

A treaty creating the European Economic Community was signed in Rome on Mar. 25, 1957. Members: France, West Germany, Italy, Belgium, the Netherlands and Luxembourg. This grouping has become known as the Common Market, or the "Inner Six." The purpose was to reduce gradually trade and other trade barriers among the countries with the hope eventually creating a vast free-trade area comparable to the United States. The member countries also planned to develop a common tariff policy toward imports from the rest of the world.

A second group was formed, being initiated by seven countries in Stockholm on Nov. 20, 1959. The seven were Austria, Great Britain, Denmark, Norway, Portugal, Sweden, and Switzerland. The official name is the European Free Trade Association, unofficially called the "Outer Seven." Again, the goal is to eliminate trade barriers among themselves, with free trade to be achieved by Jan., 1970. The chief difference is that the members would be free to pursue individual trade policies in relation to the rest of the world. Thus Britain came along to this one—but not the "Inner Six"—without impairing its trade agreements with other nations of the British Commonwealth.

All these countries have been associated for a decade in the more loosely structured Organization for European Economic Co-operation.

In Jan., 1960, the United States entered into active participation at a Paris conference, and proposed a new trans-Atlantic trade organization which would include both European groups plus the United States and Canada. One purpose was to minimize rivalry between the two European groups.

Reds' "NATO"—Warsaw Pact (Signed: May 14, 1955)

Members: Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Rumania, U.S.S.R.

The Warsaw Pact was prompted by the admission of Western Germany to NATO and may be considered as the Communist equivalent in Eastern Europe to NATO in Western Europe. Article 4 of the agreement contains the same provisions as Article 4 of NATO, stating that an attack on one shall be regarded as an attack on all. Article 5 provides for a unified military command.

Tripartite Security Treaty

(United States, Australia, New Zealand)

provisions of the Tripartite agreement signed on Sept. 1, 1951, at San Francisco:

the parties undertake to settle by peaceful means any international disputes in which they may be involved.

the parties will maintain and develop individual and collective capacity to resist armed attack.

the parties will consult together regarding the territorial integrity, political independence or security of any of the areas threatened in the Pacific.

4. Each party recognizes that an armed attack in the Pacific area on either of the other parties would be dangerous to its own peace and safety.

5. The parties hereby establish a council, consisting of their foreign ministers or their deputies, to consider matters concerning the implementation of this treaty.

6. This treaty shall remain in force indefinitely.

A Security Treaty similar in its provisions to the Tripartite Security Treaty was signed by the United States and the Philippines in Washington, D. C., Aug 30, 1951.

MAJOR U. S. POSTWAR POLICY DECISIONS

The Marshall Plan

After World War II, recovery programs for the nations of Europe, as well as aid from the United States, were co-ordinated. In June, 1947, Gen. C. Marshall, then Secretary of State, asserted the need for integrated recovery efforts against "hunger, poverty, chaos, and chaos." Congress, in April, appropriated \$5.4 billion. The United States established the Economic Cooperation Administration while European nations set up the Organization for European Economic Administration. Under a system of counterpart funds, each participating nation set aside, in its own currency, an amount matching the aid it received. As part of the European Recovery Program, Marshall aid was economic in its early stages, but with the worsening international situation—particularly after Korea—emphasis was shifted to rearmament. When ended in Dec., 1951, a year ahead of schedule, it had cost \$11 billion, but substantial amounts had been committed to large military ventures.

Truman Doctrine

President Truman took a decisive step in March, 1947, when he obtained from Congress authorization to spend \$400 million to aid Greece and Turkey. His move was directly on withdrawal of aid to those countries by Great Britain, whose

resources were dwindling. Greece suffered from Communist guerrilla infiltration; Turkey lived under threat of Russia's constant pressures. Besides the appropriation, Congress authorized shipment of military equipment and dispatch of a military and technical mission. By 1950, the Red guerrillas had given up the struggle, and in Turkey results were much more immediately successful. The Truman Doctrine is regarded as the first significant experiment in the policy of "containment," although it preceded by four months the intellectual presentation of this policy by George Kennan.

Eisenhower Doctrine

In January, 1957, President Eisenhower, noting the unsettled state of the Middle East, asked authority from Congress to co-operate with any nation in that area for economic development, to undertake programs of military assistance for such nations which desired it and to use U. S. armed forces to protect Mid-East countries "requesting such aid" against "overt armed aggression from any nation controlled by international communism." In March, Congress authorized expenditures up to \$200 million for 1957. Anti-Communist declarations were immediately forthcoming from Lebanon and Libya; and, more important, King Hussein of Jordan took a strong stand against the leftist drift in his country. Arms also were shipped to the area to counter the build-up of Soviet military equipment in Syria.

(See also Index for Headline History listing events of 1917-59.)

The Cairo Conference

Important provisions of the Conference, which was held Nov. 22-26, 1943:

The several military missions have agreed upon future military operations against Japan. The Three Great Allies expressed their resolve to bring unrelenting pressure against their brutal enemies by sea, land, and air. This pressure is already rising.

The Three Great Allies are fighting this war to restrain and punish the aggression of Japan. They covet no gain for themselves and have no thought of territorial expansion. It is their purpose that Japan shall be stripped of all the islands in the Pacific which she has seized or occupied since the beginning of the first World War

in 1914, and that all the territories Japan has stolen from the Chinese, such as Manchuria, Formosa, and the Pescadores, shall be restored to the Republic of China. Japan will also be expelled from all other territories which she has taken by violence and greed. The aforesaid Three Great Powers, mindful of the enslavement of the people of Korea, are determined that in due course Korea shall become free and independent.

With these objectives in view the Three Allies, in harmony with those of the United Nations at war with Japan, will continue to persevere in the serious and prolonged operations necessary to procure the unconditional surrender of Japan.

The Teheran Conference

(Nov. 28-Dec. 1, 1943)

The President of the United States of America, the Premier of the Union of Soviet Socialist Republics, and the Prime Minister of the United Kingdom have consulted with each other and, with the Prime Minister of Iran, desire to declare the mutual agreement of their three Governments regarding relations with Iran.

The Governments of the United States of America, the Union of Soviet Socialist Republics, and the United Kingdom recognize the assistance which Iran has given in the prosecution of the war against the common enemy, particularly by facilitating transportation of supplies from overseas to the Soviet Union. The three Governments realize that the war has caused special economic difficulties for Iran and they are agreed that they will continue to make available to the Government of Iran such economic assistance as may be possible, having regard to the heavy demands made upon them by their worldwide military operations and to the worldwide shortage of transport, raw materials, and supplies for civilian consumption.

With respect to the post-war period, the Governments of the United States of America, the Union of Soviet Socialist Republics, and the United Kingdom are in accord with the Government of Iran that any economic problem confronting Iran after the close of hostilities should receive consideration along with those of the other members of the United Nations by the conferences or international agencies here created to deal with international economic matters.

The Governments of the United States of America, the Union of Soviet Socialist Republics, and the United Kingdom are in one with the Government of Iran in their desire for the maintenance of the independence, sovereignty, and territorial integrity of Iran. They count upon the participation of Iran together with all other peace-loving nations in the establishment of international peace, security, and prosperity after the war in accordance with the principles of the Atlantic Charter, which all four governments have continued to subscribe.

The Yalta Conference

Important provisions of the Conference, which was held Feb. 4-11, 1945:

The Occupation and Control of Germany

We have agreed on common policies and plans for enforcing the unconditional surrender terms which we shall impose together on Nazi Germany after German armed resistance has been finally crushed. These terms will not be made known until the final defeat of Germany has been accomplished. Under the agreed plan, the forces of the three powers will each occupy a separate zone of Germany. Coordinated administration and control has been provided for under the plan through a central Control Commission, consisting of

the supreme commanders of the three powers, with headquarters in Berlin. It has been agreed that France should be invited by the three powers, if she should so desire, to take over a zone of occupation and to participate as a fourth member of the Control Commission. The limits of the French zone will be agreed upon by the four Governments concerned through their representatives on the European Advisory Commission.

It is our inflexible purpose to destroy German militarism and nazism and to ensure that Germany will never again be able to disturb the peace of the world. We are determined to disarm and disband

an armed forces; break up for all the German General Staff that has edly contrived the resurgence of an militarism; remove or destroy all military equipment; eliminate or all German industry that could be or military production; bring all war als to just and swift punishment exact reparation in kind for the deon wrought by the Germans; wipe the Nazi Party, Nazi laws, organiza- and institutions, remove all Nazi militarist influences from public of- and from the cultural and economic the German people; and take in any such other measures in Germany y be necessary to the future peace fety of the world. It is not our pur- o destroy the people of Germany, nly when nazism and militarism been extirpated will there be hope decent life for Germans, and a place em in the comity of nations.

Under Which Russia Entered the Against Japan

leaders of the Three Great Powers—oviet Union, the United States of ca, and Great Britain—have agreed n two or three months after Ger- has surrendered and the war in Eu- as terminated the Soviet Union shall into the war against Japan on the f the Allies on condition that:

the status quo in Outer Mongolia (Mongolian People's Republic) shall served;

the former rights of Russia violated treacherous attack of Japan in 1904 be restored, viz.:

(a) the southern part of Sakhalin as well as all the islands adjacent to it shall be returned to the Soviet Union,

(b) the commercial port of Dairen shall be internationalized, the preeminent in-terests of the Soviet Union in this port being safeguarded and the lease of Port Arthur as a naval base of the U.S.S.R. re-stored,

(c) the Chinese-Eastern Railroad and the South-Manchurian Railroad which provides an outlet to Dairen shall be jointly operated by the establishment of a joint Soviet-Chinese Company, it being understood that the preeminent interests of the Soviet Union shall be safeguarded and that China shall retain full sover-eignty in Manchuria;

3. The Kurile Islands shall be handed over to the Soviet Union.

It is understood that the agreement concerning Outer Mongolia and the ports and railroads referred to above will require concurrence of Generalissimo Chiang Kai-shek. The President will take measures in order to obtain this concurrence on ad-vice from Marshal Stalin.

The Heads of the Three Great Powers have agreed that these claims of the Soviet Union shall be unquestionably fulfilled after Japan has been defeated.

For its part the Soviet Union expresses its readiness to conclude with the National Government of China a pact of friendship and alliance between the U.S.S.R. and China in order to render assistance to China with its armed forces for the pur-pose of liberating China from the Japanese yoke.

The Potsdam Declaration

of the declaration issued at Potsdam, Ger- July 26, 1945, outlining the terms under Japan would be allowed to surrender:

We, the President of the United the President of the national gov- of the Republic of China, and the Minister of Great Britain, repre- g the hundreds of millions of our ymen, have conferred and agreed Japan shall be given the opportunity this war.

The prodigious land, sea, and air of the United States, the British , and China, many times reinforced ir armies and air fleets from the re poised to strike the final blow at This military power is sustained spired by the determination of all nations to prosecute the war against until she ceases to resist.

The result of the futile and senseless n resistance to the might of the l free peoples of the world stands n awful clarity as an example to the of Japan.

The might that now converges on Ja-pan is immeasurably greater than that which, when applied to the resisting Nazis, necessarily laid waste to the land, the in-dustry, and the method of life of the whole German people.

The full application of our military power, backed by our resolve, will mean the inevitable and complete destruction of the Japanese armed forces and just as inevitably the utter devastation of the Japanese homeland.

4. The time has come for Japan to de-cide whether she will continue to be con-trolled by these self-willed militaristic ad-visers whose unintelligent calculations have brought the empire of Japan to the threshold of annihilation, or whether she will follow the path of reason.

5. The following are our terms: we will not deviate from them; there are no alter-natives; we shall brook no delay.

6. There must be eliminated for all time the authority and influence of those

who have deceived and misled the people of Japan into embarking on world conquest, for we insist that a new order of peace, security, and justice will be impossible until irresponsible militarism is driven from the world.

7. Until such a new order is established and until there is convincing proof that Japan's war-making power is destroyed, points in Japanese territory to be designated by the Allies shall be occupied to secure the achievement of the basic objectives we are here setting forth.

8. The terms of the Cairo declaration shall be carried out and Japanese sovereignty shall be limited to the Islands of Honshu, Hokkaido, Kyushu, Shikoku, and such minor islands as we determine.

9. Japanese military forces after being completely disarmed shall be permitted to return to their homes with the opportunity to lead peaceful and productive lives.

10. We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation, but stern justice shall be meted out to all war criminals, including those who have visited cruelties upon our prisoners.

The Japanese government shall remove all obstacles to the revival and strength-

ening of democratic tendencies among Japanese people. Freedom of speech, religion and of thought, as well as respect for the fundamental human rights, shall be established.

11. Japan shall be permitted to maintain such industries as will sustain economy and permit the payment of reparation in kind, but not those industries which will enable her to rearm for war.

To this end, access to, as distinguished from control of, raw materials shall be permitted. Eventual Japanese participation in world trade relations shall be permitted.

12. The occupying forces of the Allies shall be withdrawn from Japan as soon as these objectives have been accomplished and there has been established in accordance with the freely expressed will of the Japanese people a peacefully inclined and responsible government.

13. We call upon the governments of Japan to proclaim now the unconditional surrender of all Japanese armed forces and to provide proper and adequate assurances of their good faith in such action. The alternative for Japan is prompt and utter destruction.

Japanese Peace Treaty

The Japanese Peace Treaty was signed at San Francisco on September 8, 1951, by 49 nations; the U.S.S.R., Poland, and Czechoslovakia were present but refused to sign. Among the major provisions of the treaty are the following:

Peace: The state of war between Japan and the Allies is terminated.

Sovereignty: Japan's full sovereignty is recognized as is its right to apply for U. N. membership.

Territory: Japan recognizes the independence of Korea; renounces all rights, titles, or claims to Formosa, the Pescadores, the Kuriles, Sakhalin, the Pacific islands formerly under mandate to Japan, the Antarctic area, Spratly Island, and the Paracels.

Japan agrees to U. N. trusteeship over the Ryukyu and Daito Islands, the Bonins, Rosario Island, the Volcano Islands, Parece Vela, and Marcus Island. Disposition of Japanese property on these islands is to be negotiated by Japan and the administering authorities.

Security: Japan agrees to settle its international disputes peaceably, to refrain from the threat of or the use of force and to abide by the principles of the U. N.

All occupation forces are to be withdrawn as soon as possible but not later than 90 days after a majority of the sig-

natory countries have given notice of ratification of this treaty. Nothing in this provision shall, however, prevent the stationing or retention of foreign armed forces in Japanese territory by agreement with one or more of the Allies.

Political-Economic Clauses: Japan enters into fisheries treaties; may negotiate most-favored-nation trade and maritime treaties with the Allies; renounces all special rights and interests in China.

Japan accepts the judgments of the International Military Tribunal and the War Crimes Courts.

Claims and Property: Japan recognizes its responsibility to pay reparations but the Allies recognize its limited economic capacity; therefore, Japan shall pay through goods to be manufactured in Japan from raw materials provided by the victim nations and by services. The Allies may retain certain properties seized from Japan but require the latter to return their properties within 6 months. Japan recognizes Allied industrial, literary, and artistic property rights. It agrees to indemnify prisoners of war who suffered unduly but renounces similar claims against the Allies.

Settlement of Disputes: Any disagreements arising out of the interpretation of this treaty and not otherwise settled shall be submitted to the International Court of Justice.

THE DECLARATION OF INDEPENDENCE

IN CONGRESS, JULY 4, 1776

THE UNANIMOUS DECLARATION of the thirteen united STATES OF AMERICA.

When in the Course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.—That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed,—whenever any Form of Government becomes destructive of these ends, it is the right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security.—Such has been the patient sufferance of these Colonies; and now it is necessary which constrains them to alter their former Systems of Government.—The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public

Good; he has forbidden his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their Public Records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative Powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the mean time exposed to all the dangers of invasion from without, and convulsions within.

On April 12, 1776, the legislature of North Carolina authorized its delegates to the Continental Congress to join with the other colonies in a declaration of separation from Great Britain; the first colony to instruct its delegates to take the actual initiative was Virginia on May 15. On June 7, 1776, Richard Henry Lee of Virginia offered a resolution to the Congress to the effect that these United Colonies are, and of right ought to be, free and independent States. A committee, consisting of John Adams, Benjamin Franklin, and Robert R. Livingston, and Roger

Sherman was organized to "prepare a declaration to the effect of the said first resolution." The Declaration of Independence was adopted on July 4, 1776.

Most delegates signed the Declaration on August 2, but George Wythe (Va.) signed on August 27; Richard Henry Lee (Va.), Elbridge Gerry (Mass.), and Oliver Wolcott (Conn.) in September; Matthew Thornton (N. H.), not a delegate until September, in November; and Thomas McKean (Del.), although present on July 4, not until 1781 by special permission, having served in the army in the interim.

He has endeavoured to prevent the population of these States; for that purpose obstructing the Laws for Naturalization of Foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary Powers.

He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, Standing Armies without the Consent of our legislatures.

He has affected to render the Military independent of and superior to the Civil Powers.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock Trial, from punishment for any Murders which they should commit on the Inhabitants of these States:

For cutting off our Trade with all parts of the world:

For imposing Taxes on us without our Consent:

For depriving us in many cases, of the benefits of Trial by Jury:

For transporting us beyond Seas to be tried for pretended offences:

For abolishing the free System of English Laws in a neighbouring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it once an example and fit instrument for introducing the same absolute rule into these Colonies:

For taking away our Charters, abolishing our most valuable Laws and altering fundamentally the Forms of our Governments:

For suspending our own Legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated Government here, by declaring us out of his Protection and withdrawing War against us.

He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large Armies of foreign Mercenaries to complete the works of death, desolation and tyranny, already begun with circumstances of Cruelty and Perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation.

He has constrained our fellow Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us, and has endeavoured to bring the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare, is an undistinguished destruction of all ages, sexes and conditions.

In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: Our repeated Petitions have been answered only by repeated injury. A Prince whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people.

Nor have We been wanting in attentions to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

WE, THEREFORE, the Representatives of the UNITED STATES OF AMERICA, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by Authority of the good People of these Colonies, solemnly publish and declare, That these United Colonies are, and of Right ought to be

ND INDEPENDENT STATES; that they are Absolved from all Allegiance to the British and that all political connection between them and the State of Great Britain, ought to be totally dissolved; and that as Free and Independent States, they have power to levy War, conclude Peace, contract Alliances, establish Commerce, and to other Acts and Things which Independent States may of right do.—And for the t of this Declaration, with a firm reliance on the protection of Divine Providence, mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

JOHN HANCOCK.

New Hampshire.

ah Bartlett,
. Whipple,
thew Thornton.

Rhode Island.

. Hopkins,
iam Ellery.

Connecticut.

er Sherman,
el Huntington,
. Williams,
er Wolcott.

New York.

Floyd,
. Livingston,
as. Lewis,
s Morris.

New Jersey.

d. Stockton,
Witherspoon,
. Hopkinson,
Hart,
Clark.

Pennsylvania.

Robt. Morris,
Benjamin Rush,
Benj. Franklin,
John Morton,
Geo. Clymer,
Jas. Smith,
Geo. Taylor,
James Wilson,
Geo. Ross.

Massachusetts-Bay.

Saml. Adams,
John Adams,
Robt. Treat Paine,
Elbridge Gerry.

Delaware.

Caesar Rodney,
Geo. Read,
Tho. M'Kean.

Maryland.

Samuel Chase,
Wm. Paca,
Thos. Stone,
Charles Carroll of Carrollton.

Virginia.

George Wythe,
Richard Henry Lee,
Th. Jefferson,
Benj. Harrison,
Ths. Nelson, Jr.,
Francis Lightfoot Lee,
Carter Braxton.

North Carolina.

Wm. Hooper,
Joseph Hewes,
John Penn.

South Carolina.

Edward Rutledge,
Thos. Heyward, Junr.,
Thomas Lynch, Junr.,
Arthur Middleton.

Georgia.

Button Gwinnett,
Lyman Hall,
Geo. Walton.

IN CONGRESS

JANUARY, 18, 1777.

red:

that an authenticated copy of the Declaration of Independency, with the names of the Members of Congress subscribing the same, be sent to each of the United States, and that they be desired to have the same put on record.

order of Congress.

st, CHAS. THOMSON, Secy. A true copy. JOHN HANCOCK, Presidt.

The Statue of Liberty

statue of Liberty ("Liberty Enlight-
the World") is a 225-ton, steel-rein-
copper female figure, 152 ft. in
facing the ocean from Liberty*
n New York Harbor. The right hand
oft a torch, and the left hand car-
tablet upon which is inscribed:
1776."

statue was designed by Frédéric Au-
 Bartholdi, at the request of the
American Union, as a present to the
to commemorate the centennial of
n independence. It cost \$250,000.

pedestal, almost 150 ft. in height,
cted by the U. S., and its cost of
\$300,000 was met by popular sub-

Bedloe's Island prior to 1956.

scription in this country. The cornerstone
was laid Aug. 5, 1884, and the unveiling of
the statue took place Oct. 28, 1886.

On a tablet inside the pedestal is en-
graved the following sonnet, written by
Emma Lazarus:

The New Colossus

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles. From her beacon hand
Glows world-wide welcome; her mild eyes com-
mand

The air-bridged harbor that twin cities frame.
"Keep, ancient lands, your storied pomp!" cries she
With silent lips. "Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door."

CONSTITUTION of the UNITED STATES OF AMERICA

THE oldest federal constitution in existence was framed by a convention of delegates from twelve of the thirteen original states in Philadelphia in May, 1787, Rhode Island failing to send a delegate. George Washington presided over the session, which lasted until September 17, 1787. The draft (originally a preamble and seven Articles) was submitted to all thirteen states and was to become effective when ratified by nine states. It went into effect on the first Wednesday in March, 1789, having been ratified by New Hampshire, the ninth state to approve, on June 21, 1788. The states ratified the Constitution in the following order:

Delaware	December 7, 1787
Pennsylvania	December 12, 1787
New Jersey	December 18, 1787
Georgia	January 2, 1788
Connecticut	January 9, 1788
Massachusetts	February 6, 1788
Maryland	April 28, 1788

South Carolina	May 23, 1788
New Hampshire	June 21, 1788
Virginia	June 25, 1788
New York	July 26, 1788
North Carolina	November 21, 1789
Rhode Island	May 29, 1790

Outline of the Constitution

ARTICLE I

SEC. 1. Legislative powers; in whom vested.

SEC. 2. House of Representatives, how and by whom chosen—Qualifications of a Representative—Representatives and direct taxes, how apportioned—Enumeration—Vacancies to be filled—Power of choosing officers, and of impeachment.

SEC. 3. Senators, how and by whom chosen—How classified—State Executive, when to make temporary appointments, in case, etc.—Qualifications of a Senator—President of the Senate, his right to vote—President pro tem., and other officers of the Senate, how chosen—Power to try impeachments—When President is tried, Chief Justice to preside—Sentence.

SEC. 4. Times, etc., of holding elections, how prescribed—At least one Session in each year.

SEC. 5. Membership—Quorum—Adjournments—Rules—Power to punish or expel—Journal—Time of adjournments, how limited, etc.

SEC. 6. Compensation—Privileges—Disqualification in certain cases.

SEC. 7. House to originate all revenue bills—Veto—Bill may be passed by two-thirds of each house, notwithstanding, etc.—Bill, not returned in ten days, to become a law—Provisions as to orders, concurrent resolutions, etc.

SEC. 8. Powers of Congress.

SEC. 9. Provision as to migration or importation of certain persons—Habeas Corpus—Bills of attainder, etc.—Taxes, how apportioned—No export duty—No commercial preference—Money, how drawn from treasury, etc.—No titular nobility—Officers not to receive presents, etc.

SEC. 10. States prohibited from the exercise of certain powers.

ARTICLE II

SEC. 1. President; his term of office—Electors of President; number and how appointed—Electors to vote on same day—Qualification of President—On whom duties devolve in case of his removal, death, etc.—President's compensation—Oath of office.

SEC. 2. President to be commander in chief—He may require opinions of Cabinet Officers, etc., may pardon—Treaty-making power—Nomination of certain officers—When President may fill vacancies.

SEC. 3. President shall communicate with Congress—He may convene and adjourn Congress, in case of disagreement, etc.—Shall receive ambassadors, execute laws and commission officers.

SEC. 4. All civil offices forfeited for certain crimes.

ARTICLE III

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SEC. 2. Judicial power; to what cases extends—Original jurisdiction of Supreme Court—Appellate—Trial by jury, etc.—Trial, where.

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of sex.

XX. Commencement of terms of Presi-
dent, Vice President, and mem-
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bling of Congress.

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XXII. No person to serve as President for
more than two terms.

The Constitution of the United States of America

PREAMBLE.—WE THE PEOPLE of the
United States, in Order to form a more
Union, establish Justice, insure do-
Tranquility, provide for the com-
ference, promote the general Welfare,
and secure the Blessings of Liberty to our-
selves and our Posterity, do ordain and
establish this Constitution for the United
States of America.

ARTICLE I

Section 1

Legislative powers vested in Congress.—
Legislative powers herein granted shall
be exercised in a Congress of the United
States, which shall consist of a Senate and
of Representatives.

Section 2

Composition of the House of Representa-
tives.—1. The House of Representatives
shall be composed of Members chosen
every second Year by the People of the
several States, and the Electors in each
State shall have the Qualifications requir-
ed of Electors of the most numerous
Branch of the State Legislature.

Qualifications of Representatives.—2. No
person shall be a Representative who shall
not have attained to the Age of twenty-
five Years, and been seven Years a Citizen

of the United States, and who shall not,
when elected, be an Inhabitant of that
State in which he shall be chosen.

Apportionment of Representatives and
direct taxes—census.*—3. [Representatives
and direct Taxes shall be apportioned
among the several States which may be
included within this Union, according to
their respective Numbers, which shall be
determined by adding to the whole Num-
ber of free Persons, including those bound
to Service for a Term of Years, and ex-
cluding Indians not taxed, three fifths of
all other Persons.] The actual Enumeration
shall be made within three Years after the
first Meeting of the Congress of the United
States, and within every subsequent Term
of ten Years, in such Manner as they shall
by Law direct. The Number of Representa-
tives shall not exceed one for every thirty
Thousand, but each State shall have at
Least one Representative; and until such
enumeration shall be made, the State of
New Hampshire shall be entitled to chuse
three, Massachusetts eight, Rhode-Island
and Providence Plantations one, Connecti-
cut five, New York six, New Jersey four,
Pennsylvania eight, Delaware one, Mary-
land six, Virginia ten, North Carolina five,
South Carolina five, and Georgia three.

Filling of vacancies in representation.—
4. When vacancies happen in the Repre-
sentation from any State, the Executive

Authority thereof shall issue Writs of Election to fill such Vacancies.

Selection of officers; power of impeachment.—5. The House of Representatives shall chuse their Speaker and other Officers; and shall have the sole Power of Impeachment.

Section 3*

The Senate.—[1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.]

Classification of Senators; filling of vacancies.—2. Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the Expiration of the second Year, of the second Class at the Expiration of the fourth Year, and of the third Class at the Expiration of the sixth Year, so that one-third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments [until the next Meeting of the Legislature, which shall then fill such Vacancies].

Qualification of Senators.—3. No Person shall be a Senator who shall not have attained to the Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

Vice President to be President of Senate.

—4. The Vice President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

Selection of Senate officers; President pro tempore.—5. The Senate shall chuse their other Officers, and also a President pro tempore, in the Absence of the Vice President, or when he shall exercise the Office of President of the United States.

Senate to try impeachments.—6. The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

Judgment in cases of impeachment.—7. Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and en-

joy any Office of honor, Trust, or Profit under the United States: but the Party convicted shall nevertheless be liable as subject to Indictment, Trial, Judgment and Punishment, according to Law.

Section 4

Control of congressional elections.—The Times, Places and Manner of holding Elections for Senators and Representatives shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places choosing Senators.

Time for assembling of Congress.—The Congress shall assemble at least once in every Year, and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Time.

Section 5

Each house to be the judge of the election and qualifications of its members.—regulations as to quorum.—1. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each house to determine its own rules.—2. Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behaviour, and, with the Concurrence of two thirds, expel a Member.

Journals and yeas and nays.—3. Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in its Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one fifth of those Present, be entered on the Journal.

Adjournment.—4. Neither House, during the Session of Congress shall, without the Consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

Section 6

Compensation and privileges of Members of Congress.—1. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of

* The 1st paragraph of this section and as much of the 2nd paragraph as relates to filling vacancies are amended by the 17th Amendment.

† Amended by the 20th Amendment, Section 2.

be privileged from Arrest during Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

Incompatible offices; exclusions.—2. No Senator or Representative shall, during the Term for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments of which shall have been increased during his Term; and no Person holding any Office under the United States, shall be a Senator or Representative in either House during his Continuance in Office.

Section 7

Revenue bills to originate in House.—1. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Power of passing bills; veto power of President.—2. Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States. If he approve he shall sign it, but if he disapprove he shall return it, with his Objections, to that House in which it shall have originated, who shall enter the Objections on their Journal, and proceed to reconsider it. If after such Reconsideration two thirds of that House shall agree to the Bill, it shall be sent, together with the Objections, to the other House, which it shall likewise be reconsidered, and if approved by two thirds of that House it shall become a Law. But in all Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, it shall be a Law, in like Manner as if he had signed it, unless the Congress by Adjournment prevent its Return, in which Case it shall not be a Law.

Concurrent orders or resolutions, to be passed by President.—3. Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of Adjournment) shall be presented to the President of the United States; and before it shall take Effect, shall be approved by him, or being disapproved by him, it shall be repassed by two thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

Section 8

General powers of Congress.*

The Congress shall have Power.—1. To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States;

Borrowing of money.—2. To borrow Money on the credit of the United States;

Regulation of commerce.—3. To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;

Naturalization and bankruptcy.—4. To establish an uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States;

Money, weights and measures.—5. To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures;

Counterfeiting.—6. To provide for the Punishment of counterfeiting the Securities and current Coin of the United States;

Post offices.—7. To establish Post Offices and post Roads;

Patents and copyrights.—8. To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;

Inferior courts.—9. To constitute Tribunals inferior to the supreme Court;

Piracies and felonies.—10. To define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations;

War; marque and reprisal.—11. To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water;

Armies.—12. To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years;

Navy.—13. To provide and maintain a Navy;

Land and naval forces.—14. To make Rules for the Government and Regulation of the land and naval Forces;

Calling out militia.—15. To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions;

Organizing, arming and disciplining militia.—16. To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be

employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress;

Exclusive legislation over District of Columbia.—17. To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the Acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings;—And

To enact laws necessary to enforce Constitution.—18. To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.

Section 9

Migration or importation of certain persons not to be prohibited before 1808.—1. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight, but a Tax or duty may be imposed on such Importation, not exceeding ten dollars for each Person.

Writ of habeas corpus not to be suspended; exception.—2. The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

Bills of attainder and ex post facto laws prohibited.—3. No Bill of Attainder or ex post facto Law shall be passed.

Capitation and other direct taxes.—4. No Capitation, or other direct Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken.*

Exports not to be taxed.—5. No Tax or Duty shall be laid on Articles exported from any State.

No preference to be given to ports of any State; interstate shipping.—6. No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

Money, how drawn from treasury; finan-

cial statements to be published.—7. Money shall be drawn from the Treasury but in Consequence of Appropriation made by Law; and a regular Statement and Account of the Receipts and Expenses of all public Money shall be published from time to time.

Titles of nobility not to be granted; acceptance by government officers of gifts from foreign powers.—8. No Title of Nobility shall be granted by the United States: And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title of any kind whatever, from any Prince, or foreign State.

Section 10

Limitations of the powers of the several States.—1. No State shall enter into Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts; or grant any Title of Nobility.

State imposts and duties.—2. No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its inspection Laws; and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all Laws shall be subject to the Revision and Control of the Congress.

Further restrictions on powers of States.—3. No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger that it will not admit of delay.

ARTICLE II

Section 1

The President; the executive power.—The executive Power shall be vested in the President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice President, chosen for the same Term, shall be elected, as follows

Appointment and qualifications of presidential electors.—2. Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors equal to the whole Number of Senators

* See the 16th Amendment.

representatives to which the State may be added in the Congress: but no Senator, Representative, or Person holding an Office of Trust or Profit under the United States shall be appointed an Elector.

Final method of electing the President and Vice-President.*—[The Electors shall meet in their respective States, and vote for two Persons, of whom one at least shall not be an Inhabitant of the State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; and they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open the Certificates, and the Votes shall be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have the greatest Number, and have an equal Number of Votes, then the House of Representatives shall immediately choose by Ballot one of them for President; and if no Person have a Majority, then from the five Names on the List the said House shall in like Manner choose the President. But in choosing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person who shall have the greatest Number of Votes of the Electors shall be the Vice President. And if there should remain two or more who have equal Votes, the Senate should choose from them by Ballot the Vice President.

Congress may determine time of choosing President and day for casting their votes.—The Congress may determine the Time when the Electors, and the Day on which they shall give their Votes; which shall be the same throughout the United States.

Qualifications for the office of President.†—No Person except a natural born Citizen, or who, when born, was a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be elected to that Office who shall not have attained to the Age of thirty five Years, and been seven Years a Resident within the United States.

Term of office and vacancy in the office of President.

The first clause has been superseded by the 12th Amendment. The qualifications of the Vice President, see 12th Amendment. The second clause has been superseded by the 20th Amendment, Sections 3 and 4.

disability.—5. In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the same shall devolve on the Vice President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

Compensation of the President.—6. The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Oath to be taken by the President.—7. Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

Section 2

The President to be commander in chief of the army and navy and head of executive departments; may grant reprieves and pardons.—1. The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offences against the United States, except in Cases of Impeachment.

President may, with concurrence of Senate, make treaties, appoint ambassadors, etc.; appointment of inferior officers, authority of Congress over.—2. He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law: but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in

the Courts of Law, or in the Heads of Departments.

President may fill vacancies in office during recess of Senate.—3. The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

Section 3

President to give advice to Congress; may convene or adjourn it on certain occasions; to receive ambassadors, etc.; have laws executed and commission all officers.—He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

Section 4

All civil officers removable by impeachment.—1. The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE III

Section 1

Judicial powers; how vested; term of office and compensation of judges.—The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behaviour, and shall, at stated Times, receive for their Services, a Compensation, which shall not be diminished during their Continuance in Office.

Section 2

Jurisdiction of Federal courts.*—1. The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of Admiralty and maritime Jurisdiction;—to Controversies to which the United States shall be a Party;—to Controversies between two or more States;—between a State and

Citizens of another State;—between Citizens of different States,—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

Original and appellate jurisdiction of Supreme Court.—2. In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

Trial of all crimes, except impeachments, to be by jury.—3. The Trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the Trial shall be at such Place or Places as the Congress may by Law have directed.

Section 3

Treason defined; conviction of.—1. Treason against the United States, shall consist only in levying War against them, or adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

Congress to declare punishment for treason; proviso.—2. The Congress shall have power to declare the Punishment for Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person convicted.

ARTICLE IV

Section 1

Each State to give full faith and credit to the public acts and records of other States.—Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the Effect thereof.

Section 2

Privileges of citizens.—1. The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States.

Extradition between the several States.—2. A Person charged in any State with Treason, Felony, or other Crime, who shall flee from Justice, and be found in another State, shall on Demand of the executive

* This section is abridged by the 11th Amendment.

erty of the State from which he fled, delivered up, to be removed to the State of Jurisdiction of the Crime.
Persons held to labor or service in one State, fleeing to another, to be returned.*
No Person held to Service or Labour in one State, under the Laws thereof, being brought into another, shall, in Consequence of any Law or Regulation therein, be charged from such Service or Labour, nor shall be delivered up on Claim of the State to whom such Service or Labour is due.

Section 3

States.—1. New States may be admitted by the Congress into this Union; no new State shall be formed or admitted within the Jurisdiction of any State; nor any State be formed by the Junction of two or more States, or of Parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.
Congress shall have Power to make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; nothing in this Constitution shall be construed as to Prejudice any Claims of the United States, or of any particular

Section 4

Republican form of government and property guaranteed the several States.—The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive of any State, the Legislature cannot be convened) domestic Violence.

ARTICLE V

in which the Constitution can be amended.—The Congress, whenever two thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of two thirds of the several States, shall call a Convention for proposing Amendments, which, in either Case, shall be valid to all Intents and Purposes, as soon as they shall be ratified by the Legislatures of three fourths of the several States, or by Conventions in three fourths thereof, as the one or the other Mode of Ratification may be proposed by Congress; Provided that no Amendment which may be made prior to the Year one thousand eight hundred and eighty shall in any Manner affect the first and third Clauses in the Ninth Section of the first Article; and that no State, without the Consent, shall be deprived of its equal Suffrage in the Senate.

the 13th Amendment.

ARTICLE VI

Debts contracted under the confederation secured.—1. All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

Constitution, laws and treaties of the United States to be supreme.—2. This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Who shall take constitutional oath; no religious test as to official qualification.—3. The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

ARTICLE VII

Constitution to be considered adopted when ratified by nine States.—The Ratification of the Conventions of nine States shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth. In witness whereof We have hereunto subscribed our Names.

GO. WASHINGTON

President and Deputy from Virginia

NEW HAMPSHIRE

John Langdon Nicholas Gilman

MASSACHUSETTS

Nathaniel Gorham Rufus King

CONNECTICUT

Wm Saml Johnson Roger Sherman

NEW YORK

Alexander Hamilton

NEW JERSEY

Wm Livingston Wm Paterson
David Brearley Jona: Dayton

PENNSYLVANIA

B Franklin Thomas Mifflin
Robt Morris Geo. Clymer
Thos FitzSimons Jared Ingersoll
James Wilson Gouv Morris

DELAWARE

Geo: Read Gunning Bedford Jun
John Dickinson Richard Bassett
Jaco: Broom

MARYLAND

James McHenry Dan of St Thos Jenifer
Dani Carroll

VIRGINIA

John Blair —

James Madison Jr.

NORTH CAROLINA

Wm Blount
Hu Williamson

Richd Dobbs Spaight

SOUTH CAROLINA

J. Rutledge
Charles PinckneyCharles Cotesworth Pinckney
Pierce Butler

GEORGIA

William Few
Attest: William Jackson, Secretary.

Abr Baldwin

AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES

(Amendments I to X inclusive, popularly known as the Bill of Rights, were proposed and sent to the states by the first session of the First Congress. They became effective Dec. 15, 1791.)

ARTICLE I

Freedom of religion, speech, of the press, and right of petition.—Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II

Right of people to bear arms not to be infringed.—A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

ARTICLE III

Quartering of troops.—No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

ARTICLE IV

Persons and houses to be secure from unreasonable searches and seizures.—The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V

Trials for crimes; just compensation for private property taken for public use.—No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ARTICLE VI

Civil rights in trials for crimes enacted.—In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the offence shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have a compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

ARTICLE VII

Civil rights in civil suits.—In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

ARTICLE VIII

Excessive bail, fines and punishment prohibited.—Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX

Reserved rights of people.—The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

ARTICLE X

Powers not delegated, reserved to States and people respectively.—The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

ARTICLE XI

(The proposed amendment was sent to the States Mar. 5, 1794, by the Third Congress. It became effective Jan. 8, 1798.)

Judicial power of United States not to extend to suits against a State.—The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

ARTICLE XII

Proposed amendment was sent to the states in 1803, by the Eighth Congress. It became effective Sept. 25, 1804.)

ent mode of electing President and Vice-President by electors.*—The Electors meet in their respective states, and by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as President, and in separate ballots the person voted for as Vice-President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate;—The President of the Senate shall, in the presence of the Senate and House of Representatives, open the certificates and the votes shall then be counted;—The person having the greatest number of votes for President, shall be President, if such number be a majority of the whole number of Electors appointed; if no person have such majority, then the persons having the highest number not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by States, each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary for a choice. And if the House of Representatives shall not choose a President before the fourth day of next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President.—The person having the greatest number of votes as Vice-President, shall be the Vice-President, if such number be a majority of the whole number of Electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

ARTICLE XIII

Proposed amendment was sent to the states in 1865, by the Thirty-eighth Congress. It became effective Dec. 18, 1865.)

Section 1

Slavery prohibited.—Neither slavery nor

involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Section 2

Congress given power to enforce this article.—Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XIV

(The proposed amendment was sent to the states June 16, 1866, by the Thirty-ninth Congress. It became effective July 28, 1868.)

Section 1

Citizenship defined; privileges of citizens.—All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Section 2

Apportionment of Representatives.—Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

Section 3

Disqualification for office; removal of disability.—No person shall be a Senator or Representative in Congress, or elector of President and Vice President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall

have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

Section 4

Public debt not to be questioned; payment of debts and claims incurred in aid of rebellion forbidden.—The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

Section 5

Congress given power to enforce this article.—The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

ARTICLE XV

(The proposed amendment was sent to the states Feb. 27, 1869, by the Fortieth Congress. It became effective Mar. 30, 1870.)

Section 1

Right of certain citizens to vote established.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

Section 2

Congress given power to enforce this article.—The Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XVI

(The proposed amendment was sent to the states July 12, 1909, by the Sixty-first Congress. It became effective Feb. 26, 1913.)

Taxes on income; Congress given power to lay and collect.—The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

ARTICLE XVII

(The proposed amendment was sent to the states May 16, 1912, by the Sixty-second Congress. It became effective May 31, 1913.)

Election of United States Senators; filling of vacancies; qualifications of electors.

1. The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for

six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

2. When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: *Provided*, That the legislature of any State may empower the executive thereof to make temporary appointments until the people fill the vacancies by election as the legislature may direct.

3. This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

ARTICLE XVIII*

(The proposed amendment was sent to the states Dec. 18, 1917, by the Sixty-fifth Congress. It was approved by three-quarters of the states by Jan. 1919, and became effective Jan. 16, 1920.)

Manufacture, sale or transportation of intoxicating liquors, for beverage purposes, prohibited.—1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

Congress and the several States shall have concurrent power to pass appropriate legislation to enforce this article.—2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

Provisions of article to become operative, when adopted by three-fourths of the States.—3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by three-fourths of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by Congress.

ARTICLE XIX

(The proposed amendment was sent to the states June 4, 1919, by the Sixty-sixth Congress. It became effective Aug. 26, 1920.)

The right of citizens to vote shall not be denied because of sex.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any States on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XX

(The proposed amendment, sometimes called the "Lame Duck Amendment," was sent to the states Mar. 3, 1932, by the Seventy-second Congress. It became effective Feb. 6, 1933; but, in accordance with Section 5, Sections 1 and 2 did not go into effect until Oct. 15, 1933.)

* Repealed by the 21st Amendment.

Section 1

of President, Vice-President, Senators and Representatives.—The terms of President and Vice-President shall end on the twentieth day of January, the terms of Senators and Representatives at noon on the third day of January, the years in which such terms would end if this article had not been amended; and the terms of their successors shall then begin.

Section 2

of assembling Congress.—The Congress shall assemble at least once in every year and such meeting shall begin at noon on the third day of January, unless they by law appoint a different day.

Section 3

ing vacancy in office of President.—If at the time fixed for the beginning of the term of the President, the President-elect shall have died, the Vice-President-elect shall become President. If a President-elect shall not have been chosen before the time fixed for the beginning of his term or if the President-elect shall have died or fail to qualify, then the Vice-President-elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein a President-elect nor a Vice-President-elect shall have qualified, determine who shall then act as President, in the manner in which one who is to act is to be selected, and such person shall continue to act until a President or Vice-President shall have qualified.

Section 4

of Congress in Presidential succession.—The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate may choose a Vice-President whenever the right of choice shall have devolved upon them.

Section 5

of taking effect.—Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this

Section 6

of ratification.—This article shall be invalid unless it shall have been ratified by three-fourths of the States

several States within seven years from the date of its submission.

ARTICLE XXI

(The proposed amendment was sent to the states Feb. 20, 1933, by the Seventy-second Congress. It became effective Dec. 5, 1933.)

Section 1

Repeal of Prohibition Amendment.—The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

Section 2

Transportation of intoxicating liquors.—The transportation or importation into any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

Section 3

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by convention in the several States, as provided in the Constitution, within seven years from the date of the submission thereof to the States by the Congress.

ARTICLE XXII

(The proposed amendment was sent to the states Mar. 21, 1947, by the Eightieth Congress. It became effective Feb. 26, 1951.)

Section 1

Limit to number of terms a President may serve.—No person shall be elected to the office of the President more than twice, and no person who has held the office of President, or acted as President, for more than two years of a term to which some other person was elected President shall be elected to the office of the President more than once. But this Article shall not apply to any person holding the office of President when this Article was proposed by the Congress, and shall not prevent any person who may be holding the office of President, or acting as President, during the term within which this Article becomes operative from holding the office of President or acting as President during the remainder of such term.

Section 2

Ratification.—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission to the States by the Congress.

Lincoln's Gettysburg Address

The Battle of Gettysburg, one of the most noted battles of the Civil War, was fought on July 1, 2, and 3, 1863. On November 19, 1863, the field was dedicated as a national cemetery by President Lincoln in a two-minute speech that was to become immortal. At the time of its de-

livery the speech was relegated to the side pages of the papers, while a two-minute address by Edward Everett, the leader of the time, caught the headlines.

The following is the text of the address as revised by President Lincoln from his notes:

FOURSCORE and seven years ago our fathers brought forth on this continent a new nation conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting-place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But in a larger sense, we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us the living rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation under God shall have a new birth of freedom, and that government of the people, by the people, for the people shall not perish from this earth.

The Monroe Doctrine

The Monroe Doctrine was announced in President James Monroe's message to Congress, during his second term on December 2, 1823 in part as follows:

"In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been deemed proper for asserting as a principle in which rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European power. . . . We owe it, therefore, to candor and to the amicable relations existing between the United States and those powers to declare that we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the governments who have declared their independence and maintain it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them or controlling in any other manner their destiny by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States."

Minority Presidents

Thirteen candidates have become President of the U. S. with a popular vote of less than 50 per cent of the total vote cast. These should be noted, however, that in elections before 1872, presidential electors were chosen by popular vote in all states. Adams' election in 1824 was by the House of Representatives, which chose him over Jackson, who had a plurality of both electoral and popular votes, but not a majority in the electoral college.

Besides Jackson in 1824, only two other candidates receiving the largest popular vote have failed to gain a majority in the electoral college—Samuel J. Tilden in 1876 and Grover Cleveland (D) in 1896.

The "minority" Presidents follow:

Year	President	Electoral	Pop.
		Pct.	Pct.
1824	John Q. Adams.....	31.8	24.2
1844	James K. Polk (D).....	61.8	40.9
1848	Zachary Taylor (W).....	56.2	47.7
1856	James Buchanan (D).....	58.7	45.5
1860	Abraham Lincoln (R).....	59.4	39.8
1876	Rutherford B. Hayes (R).....	50.1	48.3
1880	James A. Garfield (R).....	57.9	48.7
1884	Grover Cleveland (D).....	54.6	47.9
1888	Benjamin Harrison (R).....	58.1	55.9
1892	Grover Cleveland (D).....	62.4	48.6
1912	Woodrow Wilson (D).....	81.9	41.5
1916	Woodrow Wilson (D).....	52.1	51.2
1948	Harry S. Truman (D).....	57.1	48.3

The Mayflower Compact

September 6, 1620, the *Mayflower*, a small vessel of about 180 tons, started a memorable voyage from Plymouth, and with about 100* pilgrims aboard, sailed for Virginia to establish a private permanent colony in North America. Arriving at Provincetown, Mass., on November 1 (November 21, new style calendar),

forty-one of the passengers signed the famous "Mayflower Compact" as the boat lay at anchor in that Cape Cod harbor. A small detail of the pilgrims, led by William Bradford, assigned to select a place for permanent settlement landed at what is now Plymouth, Mass., on December 21, N.S.

The text of the compact follows:

IN THE NAME OF GOD, Amen. We, whose names are underwritten, the Loyal Subjects of our dread Sovereign Lord, King James, by the Grace of God, of Great Britain, France and Ireland, King, Defender of the Faith, &, having undertaken for the Glory of God, and Advancement of the Christian Faith, and the Honour of our King and Country, a voyage to plant the first colony in the northern Parts of Virginia; do by these Presents, solemnly and mutually in the Presence of God and one of another, covenant and combine ourselves together into a civil Body Politick, for our better Ordering and Preservation, and furtherance of the Ends aforesaid; And by Virtue hereof to enact, constitute, and frame, such just and equal Laws, Ordinances, Acts, Constitutions and Offices, from time to time, as shall be thought most meet and convenient for the General Good of the Colony; unto which we promise all due Submission and Obedience. A WITNESS whereof we have hereunto subscribed our names at *Cape Cod* the seventh of November, in the Reign of our Sovereign Lord, King James of England, France and Ireland, the eighteenth, and of Scotland the fifty-fourth. Anno Domini, 1620

Carver
Priest
Brewster
and Margesson
Alden
Soule
Chilton
Cooke
Fletcher
Ridgate
topher Martin

William Mullins
Thomas English
John Howland
Stephen Hopkins
Edward Winslow
Gilbert Winslow
Miles Standish
Richard Bitteridge
Francis Eaton
John Tilly
John Billington

Thomas Tinker
Samuel Fuller
Richard Clark
John Allerton
Richard Warren
Edward Liester
William Bradford
Thomas Williams
Isaac Allerton
Peter Brown
John Turner

Edward Tilly
John Craxton
Thomas Rogers
John Goodman
Edward Fuller
Richard Gardiner
William White
Edward Doten

Historians differ as to whether 100, 101, or 102 passengers were aboard.

The Early Congresses

the urging of Massachusetts and Virginia, the First Continental Congress met in Philadelphia on September 5, 1774, and was attended by representatives of all the colonies except Georgia. Patrick Henry of Virginia declared: "The distinctions between Pennsylvanians, New Yorkers and Englishers are no more. I am not a Briton but an American." This Congress, which adjourned October 26, 1774, passed resolutions calling for extension of the boycott by the colonies against British

was elected to command the Continental army. Congress adjourned Dec. 12, 1776.

Other Continental Congresses were held in Baltimore (1776-77), Philadelphia (1777), Lancaster, Pa. (1777), York, Pa. (1777-78), and Philadelphia (1778-81).

In 1781, the Articles of Confederation, although establishing a league of the thirteen states rather than a strong central government, provided for the continuance of Congress. Known thereafter as the Congress of the Confederation, it held sessions in Philadelphia (1781-83), Princeton, N. J. (1783), Annapolis, Md. (1783-84), and Trenton, N. J. (1784). Five sessions were held in New York City between the years 1785 and 1789.

The Congress of the United States, established by the ratification of the Constitution, held its first meeting on Mar. 4, 1789, in New York City. Several sessions of Congress were held in Philadelphia, and the first meeting in Washington, D. C., was on Nov. 17, 1800.

the following year, most of the delegates from the colonies were chosen by popular vote to attend the Second Continental Congress, which assembled in Philadelphia on September 10. As war had already begun between the colonies and England, the chief concerns before the Congress were the securing of military supplies, the establishment of an army and proper defenses, and the issuing of continental bills of credit. On June 15, 1775, George Washington

Presidents of the Continental Congresses

Name	Elected	Born	
Peyton Randolph, Va.	Sept. 5, 1774	c.1721	17
Henry Middleton, S. C.	Oct. 22, 1774	1717	17
Peyton Randolph, Va.	May 10, 1775	c.1721	17
John Hancock, Mass.	May 24, 1775	1737	17
Henry Laurens, S. C.	Nov. 1, 1777	1724	17
John Jay, N. Y.	Dec. 10, 1778	1745	18
Samuel Huntington, Conn.	Sept. 28, 1779	1731	17
Thomas McKean, Del.	July 10, 1781	1734	18
John Hanson, Md.	Nov. '5, 1781	1715	17
Elias Boudinot, N. J.	Nov. 4, 1782	1740	18
Thomas Mifflin, Pa.	Nov. 3, 1783	1744	18
Richard Henry Lee, Va.	Nov. 30, 1784	1732	17
John Hancock, Mass.*	Nov. 23, 1785	1737	17
Nathaniel Gorham, Mass.	June 6, 1786	1738	17
Arthur St. Clair, Pa.	Feb. 2, 1787	1734	18
Cyrus Griffin, Va.	Jan. 22, 1788	1748	18

* Resigned May 29, 1786, never having served, because of continued illness.

The Star-Spangled Banner

Francis Scott Key, 1814

O say, can you see, by the dawn's early light,
 What so proudly we hall'd at the twilight's last gleaming?
 Whose broad stripes and bright stars, thro' the perilous fight,
 O'er the ramparts we watch'd, were so gallantly streaming?
 And the rockets' red glare, the bombs bursting in air,
 Gave proof thro' the night that our flag was still there.
 O say, does that star-spangled banner yet wave
 O'er the land of the free and the home of the brave?

On the shore dimly seen thro' the mists of the deep,
 Where the foe's haughty host in dread silence reposes,
 What is that which the breeze, o'er the towering steep,
 As it fitfully blows, half conceals, half discloses?
 Now it catches the gleam of the morning's first beam,
 In full glory reflected, now shines on the stream:
 'T is the star-spangled banner: O, long may it wave
 O'er the land of the free and the home of the brave!

And where is that band who so vauntingly swore
 That the havoc of war and the battle's confusion,
 A home and a country should leave us no more?
 Their blood has wash'd out their foul footsteps' pollution.
 No refuge could save the hireling and slave
 From the terror of flight or the gloom of the grave:
 And the star-spangled banner in triumph doth wave
 O'er the land of the free and the home of the brave.

O thus be it ever when free-men shall stand
 Between their lov'd home and the war's desolation;
 Blest with vict'ry and peace, may the heav'n-rescued land
 Praise the Pow'r that hath made and preserv'd us a nation!
 Then conquer we must, when our cause it is just,
 And this be our motto: "In God is our trust!"
 And the star-spangled banner in triumph shall wave
 O'er the land of the free and the home of the brave!

ON SEPTEMBER 13, 1814, Francis Scott Key visited the British fleet in Chesapeake Bay to secure the release of Dr. William Beanes, who had been captured after the burning of Washington, D. C. The release was secured, but Key was detained on ship overnight during the shelling of Fort McHenry, one of the forts defending Baltimore. In the morning he was so delighted to see the American flag still flying over the fort that he began a poem to commemorate the occasion. Entitled "The Star-Spangled Banner," the poem soon attained wide popularity as sung to the tune "Anacreon in Heaven." The origin of this tune is obscure, but it may have been written by John Stafford Smith, a British composer born in 1750. "The Star-Spangled Banner" was officially made the National Anthem by Congress in 1931, although already adopted as such by the Army and Navy.

History of the Flag

Source: *Encyclopaedia Britannica*.

FIRST OFFICIAL AMERICAN
the Continental or Grand Union
displayed on Prospect Hill, Jan.
in the American lines besieging
It had thirteen alternate red and
stripes, with the British Union Jack
upper left corner.

June 14, 1777, the Continental Con-
gress adopted the design for a new flag,
which actually was the Continental flag
with a red cross of St. George and the
white cross of St. Andrew replaced on
the field by thirteen stars, one for
each state. No rule was made as to the
arrangement of the stars, and while they
were usually shown in a circle, there were
many other designs. It is uncertain when
the flag was first flown, but its first
announcement is believed to have
been Sept. 3, 1777.

The first public assertion that Betsy
Ross made the first Stars and Stripes ap-
peared in a paper read before the Historical
Society of Pennsylvania on March 14, 1870,
by Wm. J. Canby, a grandson. However,
his story on later investigation found no
documents of any action by Con-
gress on the flag before June 14, 1777.
In his own story, according to her
husband was that Washington, Robert
Munro and George Ross, as representatives
of Congress, visited her in Philadelphia in
1776, showing her a rough draft of
the flag and asking her if she could make
one. However, the only actual record of
the manufacture of flags by Betsy Ross is
in Harrisburg, Pa., for 14 pounds

for flags formally seceded, and unofficial groups in Kentucky and Missouri adopted ordinances of secession. On
these two states were admitted to the Confederacy, although the official state governments remained in the

and some shillings for flags for the Penn-
sylvania navy.

On Jan. 13, 1794, Congress voted to add
two stars and two stripes to the flag in
recognition of the admission of Vermont
and Kentucky to the Union. By 1818, there
were twenty states in the Union, and as it
was obvious that the flag would soon be-
come unwieldy, Congress voted April 18
to return to the original thirteen stripes
and to indicate the admission of a new
state simply by the addition of a star the
following July 4. The most recent star, the
forty-ninth, was added July 4, 1959, for
Alaska. One for Hawaii will be added July
4, 1960.

The first Confederate flag, adopted in
1861 by the Confederate convention in
Montgomery, Ala., was called the Stars and
Bars; but because of its similarity in colors
to the American flag, there was much con-
fusion in the Battle of Bull Run. To
remedy this situation, Gen. G. T. Beaure-
gard suggested a battle flag, which was
used by the Southern armies throughout
the war. The flag consisted of a red field
on which was placed a blue cross of St.
Andrew separated from the field by a white
fillet and adorned with thirteen* white
stars for the Confederate states. In May
1863, at Richmond, an official flag was
adopted by the Confederate Congress. This
flag was white and twice as long as wide;
the union, two-thirds the width of the
flag, contained the battle flag designed for
Gen. Beauregard. A broad transverse stripe
of red was added Feb. 4, 1865, so that the
flag might not be mistaken for a signal of
truce.

Flag Etiquette

(Public Law 829—77th Congress)

JOINT RESOLUTION

Public Law Numbered 623, approved
June 22, 1942, entitled "Joint resolution to codify and
existing rules and customs pertaining to
the display and use of the flag of the United States

and by the Senate and House of
Representatives of the United States of
America in Congress Assembled, That Pub-
lic Law Numbered 623, approved June 22,
1942, entitled "Joint resolution to codify
and existing rules and customs
pertaining to the display and use of the
flag of the United States of America," be,
it is hereby amended to read as

The following codification of exist-
ing rules and customs pertaining to the
display and use of the flag of the United
States of America be, and it is hereby
enacted, that for the use of such civilians
and groups or organizations as may

not be required to conform with regula-
tions promulgated by one or more execu-
tive departments of the Government of the
United States.

SEC. 2. (a) It is the universal custom to
display the flag only from sunrise to sun-
set on buildings and on stationary flag-
staffs in the open. However, the flag may
be displayed at night upon special occa-
sions when it is desired to produce a pa-
triotic effect.

(b) The flag should be hoisted briskly
and lowered ceremoniously.

(c) The flag should not be displayed on
days when the weather is inclement.

(d) The flag should be displayed on all
days when the weather permits, especially
on New Year's Day, January 1; Inaugura-
tion Day, January 20; Lincoln's Birthday,
February 12; Washington's Birthday, Feb-

February 22; Army Day*, April 6; Easter Sunday (variable); Mother's Day, second Sunday in May; Memorial Day (half-staff until noon), May 30; Flag Day, June 14; Independence Day, July 4; Labor Day, first Monday in September; Constitution Day, September 17; Columbus Day, October 12; Navy Day*, October 27; Armistice Day, November 11†; Thanksgiving Day, fourth Thursday in November; Christmas Day, December 25; such other days as may be proclaimed by the President of the United States; the birthdays of States (dates of admission); and on State holidays.

(e) The flag should be displayed daily, weather permitting, on or near the main administration building of every public institution.

(f) The flag should be displayed in or near every polling place on election days.

(g) The flag should be displayed during school days in or near every schoolhouse.

SEC. 3. That the flag, when carried in a procession with another flag or flags, should be either on the marching right; that is, the flag's own right, or, if there is a line of other flags, in front of the center of that line.

(a) The flag should not be displayed on a float in a parade except from a staff, or as provided in subsection (i).

(b) The flag should not be draped over the hood, top, sides, or back of a vehicle or of a railroad train or a boat. When the flag is displayed on a motorcar, the staff shall be fixed firmly to the chassis or clamped to the radiator cap.

(c) No other flag or pennant should be placed above or, if on the same level, to the right of the flag of the United States of America, except during church services conducted by naval chaplains at sea, when the church pennant may be flown above the flag during church services for the personnel of the Navy. No person shall display the flag of the United Nations or any other national or international flag equal, above, or in a position of superior prominence or honor to, or in place of, the flag of the United States at any place within the United States or any Territory or possession thereof: *Provided*, That nothing in this section shall make unlawful the continuance of the practice heretofore followed of displaying the flag of the United Nations in a position of superior prominence or honor, and other national flags in positions of equal prominence or honor, with that of the flag of the United States at the headquarters of the United Nations.††

(d) The flag of the United States of America, when it is displayed with another

flag against a wall from crossed, should be on the right, the flag's right, and its staff should be in front of the staff of the other flag.

(e) The flag of the United States of America should be at the center and the highest point of the group when a number of flags of States or localities or persons of societies are grouped and displayed on staffs.

(f) When flags of States, cities, or counties, or pennants of societies are flown from the same halyard with the flag of the United States, the latter should always be at the peak. When the flags are flown from adjacent staffs, the flag of the United States should be hoisted first and lowered last. No such flag or pennant may be flown above the flag of the United States or to the right of the flag of the United States.

(g) When flags of two or more nations are displayed, they are to be flown on separate staffs of the same height. The flags should be of approximately equal size. International usage forbids the display of the flag of one nation above that of another nation in time of peace.

(h) When the flag of the United States is displayed from a staff projecting horizontally or at an angle from the wall, sill, balcony, or front of a building, the union of the flag should be placed at the peak of the staff unless the flag is at half-staff. When the flag is suspended vertically from a rope extending from the sidewalk to a pole at the edge of the sidewalk, the flag should be hoisted out, not first, from the building.

(i) When the flag is displayed other than by being flown from a staff, it should be displayed flat, whether indoors or outdoors, or so suspended that its folds fall as if by the weight of the flag were staffed.

(j) When the flag is displayed over the middle of the street, it should be suspended vertically with the union to the north in an east and west street or to the east in a north and south street.

(k) When used on a speaker's platform, the flag, if displayed flat, should be placed above and behind the speaker. When displayed from a staff in a church or public auditorium, if it is displayed in the chancel of a church, or on the speaker's platform in a public auditorium, it should occupy the position of honor. It should be placed at the clergyman's or speaker's right as he faces the congregation or audience. Any other flag so displayed in the chancel or on the platform should be placed at the clergyman's or speaker's left as he faces the congregation or audience. But when the flag is displayed from a staff in a church or public auditorium elsewhere than in the chancel or on the speaker's platform, it shall be placed in the position of honor to the right of the congregation or audience as they face the chancel or platform. Any other flag so displayed should be placed

* In 1949, Army Day and Navy Day were abandoned; Armed Forces Day is celebrated the 3rd Saturday of May. † In 1954, changed to Veterans Day. †† Section 3 (c) was amended by Public Law 107, approved July 9, 1953, to designate the position of the United Nations flag.

t of the congregation or audience face the chancel or platform.

The flag should form a distinctive of the ceremony of unveiling a monument, but it should never be used as the covering for the statue or monument.

The flag, when flown at half-staff, should be first hoisted to the peak for an instant and then lowered to the half-staff position. The flag should be again raised to the peak before it is lowered for the ceremony. The word "half-staff" is meant lowering to one-half the distance between the top and bottom of the staff. Crepe ribbons may be affixed to spearheads or standards in a parade only by order of the President of the United States.

When the flag is used to cover a casket, it should be so placed that the top is at the head and over the left shoulder. The flag should not be lowered over a grave or allowed to touch the ground.

4. That no disrespect should be shown to the flag of the United States of America, the flag should not be dipped to any person or thing. Regimental colors, streamers, and organization or institutional flags are to be dipped as a mark of honor.

The flag should never be displayed with the union down save as a signal of distress.

The flag should never touch anything beneath it, such as the ground, the floor, water, or merchandise.

The flag should never be carried flat against the wall, but always aloft and free. The flag should never be used as part of any sort of costume, never be dipped, drawn back, nor up, in folds, nor allowed to fall free. Bunting, white, and red, always arranged with the blue above, the white in the middle and the red below, should be used behind a speaker's desk, draping the front of a platform, and for decoration in general.

The flag should never be fastened, attached, used, or stored in such a manner as will permit it to be easily torn, damaged in any way.

The flag should never be used as a part of a ceiling.

The flag should never have placed thereon or on any part of it, nor attached to it, any mark, insignia, letter, word, figure, design, picture, or drawing of any kind.

The flag should never be used as a part of a costume, holding, carrying, or as a part of anything.

The flag should never be used for

advertising purposes in any manner whatsoever. It should not be embroidered on such articles as cushions or handkerchiefs and the like, printed or otherwise impressed on paper napkins or boxes or anything that is designed for temporary use and discard; or used as any portion of a costume or athletic uniform. Advertising signs should not be fastened to a staff or halyard from which the flag is flown.

(j) The flag, when it is in such condition that it is no longer a fitting emblem for display, should be destroyed in a dignified way, preferably by burning.

Sec. 5. That during the ceremony of hoisting or lowering the flag or when the flag is passing in a parade or in a review, all persons present should face the flag, stand at attention, and salute. Those present in uniform should render the military salute. When not in uniform, men should remove the headdress with the right hand holding it at the left shoulder, the hand being over the heart. Men without hats should salute in the same manner. Aliens should stand at attention. Women should salute by placing the right hand over the heart. The salute to the flag in the moving column should be rendered at the moment the flag passes.

Sec. 6. That when the national anthem is played and the flag is not displayed, all present should stand and face toward the music. Those in uniform should salute at the first note of the anthem, retaining this position until the last note. All others should stand at attention, men removing the headdress. When the flag is displayed, all present should face the flag and salute.

Sec. 7. That the pledge of allegiance* to the flag, "I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation under God,† indivisible, with liberty and justice for all," be rendered by standing with the right hand over the heart. However, civilians will always show full respect to the flag when the pledge is given by merely standing at attention, men removing the headdress. Persons in uniform shall render the military salute.

Sec. 8. Any rule or custom pertaining to the display of the flag of the United States of America, set forth herein, may be altered, modified, or repealed, or additional rules with respect thereto may be prescribed, by the Commander-in-Chief of the Army and Navy of the United States, whenever he deems it to be appropriate or desirable; and any such alteration or additional rule shall be set forth in a proclamation.

Approved, December 22, 1942.

HOW A PRESIDENT IS NOMINATED AND ELECTED

Selection of Delegates

THE NATIONAL CONVENTIONS of both major parties are held sometime during the summer of a presidential-election year. Earlier, each party selects delegates by primaries, conventions, committees, etc.

For their 1956 National Convention, Democrats allowed the following delegates: *District delegates*:* 2 from each state for each Congressional District; *delegates-at-large*:* 2 from each state for each U. S. Senator, each Representative-at-large in Congress, and each Congressional District lost by the state as a result of reapportionment after the 1950 Census; *bonus delegates-at-large*:* 4 from each state that went Democratic in the 1948 presidential election and 4 from each state that either (a) went Democratic in the 1952 presidential election or (b) elected a Democratic Governor or U. S. Senator on or after Nov. 4, 1952; *other delegates-at-large*: 6 each from Alaska, D. C., Hawaii, and Puerto Rico, and 3 each from the Canal Zone and the Virgin Islands.

For their 1956 convention, Republicans allowed the following delegates: *District delegates*: 1 from each state for each Congressional District that cast at least 2,000 votes either for electors in the 1952 presidential election or for the Republican nominee for Congress in the 1954 election; 1 additional if the District cast at least 10,000 votes as stipulated above; *delegates-at-large*: 4 from each state, and 2 for each Representative-at-large in Congress; *bonus delegates-at-large*: 6 from each state that either (a) went Republican in the 1952 presidential election or (b) in that election or in a subsequent one held prior to the 1956 convention, elected a Republican Governor or U. S. senator; *other delegates-at-large*: 4 from Alaska, 6 from D. C., 10 from Hawaii (including 4 for having elected a Republican Delegate to Congress in 1952), 3 from Puerto Rico, and 1 from the Virgin Islands.

(For their 1960 conventions, both parties may make changes in the manner of selecting delegates. For one thing, Alaska and Hawaii will be on the same basis as other states.)

Both parties provide for the selection of alternates. Republicans allow one alternate for each delegate. Democrats allow one alternate for each delegate-at-large, whether that delegate has one full vote or $\frac{1}{2}$ vote; but only 1 alternate is allowed for each District vote, regardless of whether the vote is represented by 1 delegate with a full vote or 2 delegates with $\frac{1}{2}$ vote each.

* Democrats grant each state the option of doubling its delegates, giving each $\frac{1}{2}$ vote.

The Conventions

At each convention a temporary chairman is chosen, usually to deliver the party's keynote speech. After a credentials committee seats the various delegates, a permanent chairman is elected. The convention then votes on a platform, drafted up by the platform committee.

By the third or fourth day, presidential nominations begin. The chairman calls a roll of states alphabetically. A state may place a candidate in nomination or withdraw to another state.

Voting, again alphabetically by state, begins after all nominations have been made and seconded. A simple majority is required in each party, although some may require many ballots.

Finally, the vice-presidential candidate is selected. Although there is no law requiring that the candidates *must* come from different states, it is practically necessary for this to be the case. Otherwise, according to the Constitution (see Amendment XII), electors from that state could vote for only one of the candidates and would have to cast their other vote for some elector of another state. This could result in the awkward situation of a presidential candidate's receiving a majority electoral vote and his running mate's failing to do so.

The Electoral College

The next step in the process is the nomination of electors in each state, according to its laws. These electors must be Federal office holders. In the November election, the voters cast their votes for electors, not for President. In some states the ballots include only the names of presidential and vice-presidential candidates; in others, they include only names of the electors. Nowadays, it is rare for electors to be split between parties. The last such occurrence was in Tennessee in 1948,[†] the last before that, in West Virginia in 1916. On three occasions (1824, 1876 and 1888), the presidential candidate with the largest popular vote failed to obtain an electoral-vote majority.

Each state has as many electors as its U. S. Senators and Representatives. In the 1960 election, the U. S. total of electors will be 537 (based on 100 Senators and 437 Representatives), of which 269 will be needed to win.

On the first Monday after the second Wednesday in December, the electors cast their votes in their respective state capitals. Constitutionally they may vote for someone other than the party candidate, but practically they cannot since they are pledged to one party and its candidate. The electors cast their votes by putting a mark on the ballot. Should the presidential or vice-

[†] In 1956 one of the 11 electoral votes of Alabama was cast for W. B. Jones.

tial candidate die between the election and the December meeting, the electors pledged to vote for him for whomever they pleased. However, it seems certain that the national committee would attempt to get an agreement among the state party leaders for a permanent candidate.

Votes of the electors, certified by the states, are sent to Congress, where the President of the Senate opens the certificates and has them counted in the presence of both Houses on January 6.

The new President is inaugurated at noon on January 20.

Should no candidate receive a majority of the electoral vote for President, the House of Representatives chooses a President from among the three highest candidates, voting, not as individuals, but as states, with a majority (now 26 needed) to elect. Should no vice-presidential candidate obtain the majority, the Senate, voting as individuals, chooses from the highest two.

Presidential Succession

Following is the order of the succession to the Presidency. No person may be President, however, unless he is eligible under the Constitution.

1. President of the U. S.

2. Speaker of the House.

3. President pro tempore of the Senate.

4. Secretary of State.

5. Secretary of the Treasury.

6. Secretary of Defense.

7. Attorney General.

8. Postmaster General.

9. Secretary of the Interior.

10. Secretary of Agriculture.

11. Secretary of Commerce.

12. Secretary of Labor.

Plurality and Majority

In order to win a plurality, a candidate must receive a greater number of votes than anyone else against him. If he receives 50 votes, for example, and two other candidates receive 40 and 10 votes, he will have a plurality of one vote over his closest opponent.

For a candidate to have a majority, a candidate does not have a majority unless he receives more than 50% of the votes cast. In the example above, the candidate does not have a majority, because his votes are less than 50% of the 101 votes cast.

How a Bill Becomes a Law

When a Senator or a Representative introduces a bill, he sends it to the clerk of his house, who gives it a number and title. This is the first reading, and the bill is referred to a committee.

The committee may decide the bill is unnecessary and table it, thus killing it.

Or it may decide the bill is worthy and hold hearings to listen to facts and opinions presented by experts and other interested persons. After members of the committee have debated the bill and perhaps made amendments, a vote is taken; and if the vote is favorable, the bill is sent back to the floor of the house.

The speaker reads the bill sentence by sentence in the house, and this is known as the second reading. Members may then debate the bill and offer amendments. In the House of Representatives, the time for debate is limited by a cloture rule, but there is no such restriction in the Senate except by a two-thirds vote for cloture. This makes possible filibusters, in which one or more opponents hold the floor to defeat the bill.

The third reading is by title only, and the bill is then put to a vote, which may be by voice or by roll call, depending on the circumstances and the customary rules. Members who must stand at the time but who wish to record

their vote may be paired if each negative vote has a balancing affirmative one.

The bill then goes to the other house of Congress, where it may be defeated, or passed with or without amendments. If the bill is defeated, it dies. If it is passed with amendments, a joint Congressional committee must be appointed by both houses to iron out the differences.

After its final passage by both houses, the bill is sent to the President. If he approves, he signs it, and the bill becomes a law. However, if he disapproves, he vetoes the bill by refusing to sign it and sending it back to the house of origin with his reasons for the veto. The objections are read and debated, and a roll-call vote is taken. If the bill receives less than a two-thirds vote, it is defeated and goes no farther. But if it receives a two-thirds vote or greater, it is sent to the other house for a vote. If that house also passes it by a two-thirds vote, the President's veto is overridden, and the bill becomes a law.

Should the President desire neither to sign nor to veto the bill, he may retain it for ten days, Sundays excepted, after which time it automatically becomes a law without signature. However, if Congress has adjourned within those ten days, the bill is automatically killed, that process of indirect rejection being known as a pocket veto.

U. S. National Conventions Since 1856

Opening date	Party	Where held	Presidential nominee	Vote
June 17, 1856	R	Philadelphia	John C. Frémont	520
June 2, 1856	D	Cincinnati	James Buchanan	296
May 16, 1860	R	Chicago	Abraham Lincoln	264
April 23, 1860	D	Charleston & Baltimore	S. A. Douglas	181
June 7, 1864	R ¹	Baltimore	Abraham Lincoln	Unanimous
Aug. 29, 1864	D	Chicago	Geo. B. McClellan	202½
May 20, 1868	R	Chicago	U. S. Grant	Unanimous
July 4, 1868	D	New York City	Horatio Seymour	Unanimous
June 5, 1872	R	Philadelphia	U. S. Grant	Unanimous
June 9, 1872	D	Baltimore	Horace Greeley	688
June 14, 1876	R	Cincinnati	R. B. Hayes	384
June 28, 1876	D	St. Louis	S. J. Tilden	598
June 2, 1880	R	Chicago	J. A. Garfield	399
June 23, 1880	D	Cincinnati	W. S. Hancock	705
June 3, 1884	R	Chicago	J. G. Blaine	541
July 11, 1884	D	Chicago	Grover Cleveland	683
June 19, 1888	R	Chicago	Benjamin Harrison	544
June 6, 1888	D	St. Louis	Grover Cleveland	By acclamation
June 7, 1892	R	Minneapolis	Benjamin Harrison	535½
June 21, 1892	D	Chicago	Grover Cleveland	617½
June 16, 1896	R	St. Louis	William McKinley	661½
July 7, 1896	D	Chicago	William J. Bryan	500
June 19, 1900	R	Philadelphia	William McKinley	Unanimous
July 4, 1900	D	Kansas City	William J. Bryan	By acclamation
June 21, 1904	R	Chicago	Theodore Roosevelt	Unanimous
July 6, 1904	D	St. Louis	Alton B. Parker	678
June 16, 1908	R	Chicago	William H. Taft	702
July 7, 1908	D	Denver	William J. Bryan	892½
June 18, 1912	R	Chicago	William H. Taft	561
June 25, 1912	D	Baltimore	Woodrow Wilson	990
June 7, 1916	R	Chicago	Charles E. Hughes	949½
June 14, 1916	D	St. Louis	Woodrow Wilson	By acclamation
June 8, 1920	R	Chicago	Warren G. Harding	692½
June 28, 1920	D	San Francisco	James M. Cox	732½
June 10, 1924	R	Cleveland	Calvin Coolidge	1,065
June 24, 1924 ²	D	New York City	John W. Davis	839 ³
June 12, 1928	R	Kansas City	Herbert Hoover	837
June 26, 1928	D	Houston	Alfred E. Smith	849½
June 14, 1932	R	Chicago	Herbert Hoover	1,126½
June 27, 1932	D	Chicago	F. D. Roosevelt	945
June 9, 1936	R	Cleveland	Alfred M. Landon	984
June 23, 1936	D	Philadelphia	F. D. Roosevelt	By acclamation
June 24, 1940	R	Philadelphia	Wendell L. Willkie	Unanimous
July 15, 1940	D	Chicago	F. D. Roosevelt	Unanimous
June 26, 1944	R	Chicago	Thomas E. Dewey	1,056
July 19, 1944	D	Chicago	F. D. Roosevelt	1,088-90
June 21, 1948	R	Philadelphia	Thomas E. Dewey	1,094-0
July 12, 1948	D	Philadelphia	Harry S. Truman	947½-20
July 17, 1948	(⁴)	Birmingham	J. Strom Thurmond	By acclamation
July 22, 1948	(⁵)	Philadelphia	Henry A. Wallace	By acclamation
July 7, 1952	R	Chicago	Dwight D. Eisenhower	845-361
July 21, 1952	D	Chicago	Adlai E. Stevenson	By acclamation
Aug. 20, 1956	R	San Francisco	Dwight D. Eisenhower	Unanimous
Aug. 13, 1956	D	Chicago	Adlai E. Stevenson	By acclamation
July 25, 1960	R	Chicago	Richard M. Nixon	Unanimous
July 11, 1960	D	Los Angeles	John F. Kennedy	Unanimous

¹ The Convention adopted name Union party to attract War Democrats and others favoring prosecution of a party. NOTE: For allocation of convention votes to states, 1956, see page 566. For 1960, see Index.

National Committee Chairmen Since 1921

Source: Republican and Democratic National Committees.

Chairman and (state)	Term	Chairman and (state)	Term
Republican		Republican (Contd.)	
ams (Iowa).....	1921-24	Meade Alcorn (Conn.).....	1957-59
Butler (Mass.).....	1924-28	Thruston B. Morton (Ky.).....	1959-
k (Colo.).....	1928-29		
Huston (Tenn.).....	1929-30	Democratic	
Fess (Ohio).....	1930-32	Cordell Hull (Tenn.).....	1921-24
ders (Ind.).....	1932-34	Clem Shaver (W. Va.).....	1924-28
etcher (Pa.).....	1934-36	John J. Raskob (N. Y.).....	1928-32
on (Kans.).....	1936-40	James A. Farley (N. Y.).....	1932-40
Martin, Jr. (Mass.).....	1940-42	Edward J. Flynn (N. Y.).....	1940-43
Spangler (Iowa).....	1942-44	Frank C. Walker (Mont.).....	1943-44
wnell, Jr. (N. Y.).....	1944-46	Robert E. Hannegan (Mo.).....	1944-47
e (Tenn.).....	1946-48	J. Howard McGrath (R. I.).....	1947-49
ott, Jr. (Pa.).....	1948-49	William M. Boyle, Jr. (Mo.).....	1949-51
nelson (N. J.).....	1949-52	Frank E. McKinney (Ind.).....	1951-52
ummerfield (Mich.).....	1952-53	Stephen A. Mitchell (Ill.).....	1952-54
oberts (Kans.).....	1953-53	Paul M. Butler (Ind.).....	1955-60
Hall (N. Y.).....	1953-57	Henry M. Jackson (Wash.).....	1960-

can National Committee: 1625 Eye St. NW., Washington 6, D. C.

tic National Committee: 1001 Connecticut Ave. NW., Washington 6, D. C.

The Confederate States of America

State	Seceded from Union	Readmitted to Union	State	Seceded from Union	Readmitted to Union
Carolina....	Dec. 20, 1860	July 18, 1868	7. Texas.....	Mar. 2, 1861	Mar. 30, 1870
ppi.....	Jan. 9, 1861	Feb. 23, 1870	8. Virginia.....	Apr. 17, 1861	Jan. 27, 1870
.....	Jan. 10, 1861	June 25, 1868	9. Arkansas.....	May 6, 1861	June 22, 1868
.....	Jan. 11, 1861	July 13, 1868	10. North Carolina....	May 20, 1861	July 20, 1868
.....	Jan. 19, 1861	July 15, 1870	11. Tennessee.....	June 24, 1861	July 24, 1866
a.....	Jan. 26, 1861	May 26, 1865			

4 other slave states—Delaware, Kentucky, Maryland and Missouri—remained in the Union.

Facts About Elections

e with highest popular vote:
ower (1956), 35,581,003.

e with highest electoral vote:
sevelt (1936), 523.

e carrying most states: F. Roose-
1936), 46.

e running most times: Norman
s, 6 (1928, 1932, 1936, 1940, 1944,

e elected, defeated, then re-
: Cleveland (1884, 1888, 1892).

Election of 1876

election of 1876 Samuel J. Tilden, Democratic candidate, received a popu-
rity but lacked one undisputed
vote to carry a clear majority of
electoral college. The crux of the prob-
in the 22 electoral votes which
dispute because Florida, Louisiana,
Carolina and Oregon each sent in 2
election returns. In the 3 southern
Republican election boards threw
ough Democratic votes to certify
Republican candidate, Hayes. In Ore-
Democratic governor disqualified

a Republican elector, replacing him with
a Democrat. Since the Senate was Republi-
can and the House of Representatives
Democrat, it seemed useless to refer the
disputed returns to the two houses for
solution. Instead Congress appointed an
Electoral Commission with 5 representa-
tives each from the Senate, the House and
the Supreme Court. All but one Justice
was named, giving the Commission 7 Re-
publican and 7 Democratic members. The
naming of the fifth Justice was left to the
other four. He was a Republican who first
favored Tilden but, under pressure from
his party, switched to Hayes, ensuring his
election by the Commission voting 8 to 7
on party lines.

Election of 1872

The presidential and vice-presidential
candidates of the Liberal Republicans and
the northern Democrats in 1872 were
Horace Greeley and B. Gatz Brown. Since
Greeley died on November 29, before the
electoral college could vote, his 66 electoral
votes were cast for other opponents of
Grant.

Presidential Elections, 1789 to 1960

Year	Presidential candidates	Party	Electoral vote	Year	Presidential candidates	Party
1789 ^{1,2}	George Washington	(no party)	69	1796 ¹	John Adams	Federalist
	John Adams	(no party)	34		Thomas Jefferson	Dem.-Rep.
	Scattering	(no party)	35		Thomas Pinckney	Federalist
	Votes not cast		8		Aaron Burr	Dem.-Rep.
1792 ¹	George Washington	Federalist	132	1800 ^{1,3}	Scattering	
	John Adams	Federalist	77		Thomas Jefferson	Dem.-Rep.
	George Clinton	Anti-Federalist	50		Aaron Burr	Dem.-Rep.
	Thomas Jefferson	Anti-Federalist	4		John Adams	Federalist
	Aaron Burr	Anti-Federalist	1		Charles C. Pinckney	Federalist
	Votes not cast		6		John Jay	Federalist

¹ For the original method of electing the President and the Vice President, see Article II, Section 1, of the Constitution. ² Only 10 states participated in the election. The New York legislature chose no electors, and North Carolina and Rhode Island had not yet ratified the Constitution. ³ As Jefferson and Burr were tied, the House of Representatives chose the President. In a vote by states, 10 votes were cast for Jefferson, 4 for Burr; 2 votes were not cast.

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party
1804 ¹	Thomas Jefferson	Dem.-Rep.	162	George Clinton	Dem.-Rep.
	Charles C. Pinckney	Federalist	14	Rufus King	Federalist
1808	James Madison	Dem.-Rep.	122	George Clinton	Dem.-Rep.
	Charles C. Pinckney	Federalist	47	Rufus King	Federalist
	George Clinton	Dem.-Rep.	6	John Langdon	Ind. (no party)
	Votes not cast		1	James Madison	Dem.-Rep.
1812	James Madison	Dem.-Rep.	128	James Monroe	Dem.-Rep.
	De Witt Clinton	Federalist	89	Votes not cast	
	Votes not cast		1	Elbridge Gerry	Dem.-Rep.
1816	James Monroe	Dem.-Rep.	183	Jared Ingersoll	Federalist
	Rufus King	Federalist	34	Votes not cast	
	Votes not cast		4	Daniel D. Tompkins	Dem.-Rep.
				John E. Howard	Federalist
1820	James Monroe	Dem.-Rep.	231	James Ross	Ind. (no party)
	John Quincy Adams	Ind. (no party)	1	John Marshall	Federalist
	Votes not cast		3	Robert G. Harper	Ind. (no party)
				Votes not cast	
				Daniel D. Tompkins	Dem.-Rep.
				Richard Stockton	Ind. (no party)
				Daniel Rodney	Ind. (no party)
1824 ²	John Quincy Adams	(no party)	84	Richard Rush	Ind. (no party)
	Andrew Jackson	(no party)	99	Robert G. Harper	Ind. (no party)
	William H. Crawford	(no party)	41	Votes not cast	
	Henry Clay	(no party)	37	John C. Calhoun	(no party)
				Nathan Sanford	(no party)
				Nathaniel Macon	(no party)
1828	Andrew Jackson	Democratic	178	Andrew Jackson	(no party)
	John Quincy Adams	Natl. Rep.	83	Martin Van Buren	(no party)
				Henry Clay	(no party)
1832	Andrew Jackson	Democratic	219	Votes not cast	
	Henry Clay	Natl. Rep.	49	John C. Calhoun	Democratic
	John Floyd	Ind. (no party)	11	Richard Rush	Natl. Rep.
	William Wirt ³	Antimasonic	7	William Smith	Ind. (no party)
	Votes not cast		2		Democratic
1836	Martin Van Buren	Democratic	170	Martin Van Buren	Democratic
	William H. Harrison	Whig	73	John Sergeant	Natl. Rep.
	Hugh L. White	Whig	26	Henry Lee	Ind. (no party)
	Daniel Webster	Whig	14	Amos Ellmaker	Antimasonic
	W. P. Mangum	Ind. (no party)	11	William Wilkins	Ind. (no party)
				Votes not cast	
1840	William H. Harrison ⁴	Whig	234	Richard M. Johnson ⁴	Democratic
	Martin Van Buren	Democratic	60	Francis Granger	Whig
				John Tyler	Democratic
				William Smith	Ind. (no party)
				John Tyler	Whig
				Richard M. Johnson	Democratic
				L. W. Tazewell	Ind. (no party)
				James K. Polk	Democratic

Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
James K. Polk	Democratic	170	George M. Dallas	Democratic	170
Henry Clay	Whig	105	Theo. Frelinghuysen	Whig	105
Zachary Taylor ^a	Whig	163	Millard Fillmore	Whig	163
Lewis Cass	Democratic	127	William O. Butler	Democratic	127
Franklin Pierce	Democratic	254	William R. King	Democratic	254
Winfield Scott	Whig	42	William A. Graham	Whig	42
James Buchanan	Democratic	174	John C. Breckinridge	Democratic	174
John C. Frémont	Republican	114	William L. Dayton	Republican	114
Millard Fillmore	American ⁷	8	A. J. Donelson	American ⁷	8
Abraham Lincoln	Republican	180	Hannibal Hamlin	Republican	180
John C. Breckinridge	Democratic	72	Joseph Lane	Democratic	72
John Bell	Const. Union	39	Edward Everett	Const. Union	39
Stephen A. Douglas	Democratic	12	H. V. Johnson	Democratic	12
Abraham Lincoln ⁸	Union ¹⁰	212	Andrew Johnson	Union ¹⁰	212
George B. McClellan	Democratic	21	G. H. Pendleton	Democratic	21
Ulysses S. Grant	Republican	214	Schuyler Colfax	Republican	214
Horatio Seymour	Democratic	80	Francis P. Blair, Jr.	Democratic	80
Votes not counted ⁹		23	Votes not counted ⁹		23

election in which the electors voted for President and Vice President on separate ballots. (See Amendment Constitution.) ² As no candidate had an electoral-vote majority, the House of Representatives chose the one from the first three. In a vote by states, 13 votes were cast for Adams, 7 for Jackson, and 4 for Crawford. Masonic party on Sept. 26, 1831, was the first party to hold a nominating convention to choose candidates for President and Vice President. ⁴ As Johnson did not have an electoral-vote majority, the Senate chose candidates for President and Vice President. ⁵ Harrison died Apr. 4, 1841, and Tyler succeeded him 33-14. ⁶ On July 1, 1850, and Fillmore succeeded him July 10. ⁷ Also known as the Know-Nothing party. ⁸ Lincoln succeeded him the same day. ⁹ 23 Southern electoral votes were excluded. ¹⁰ Name of the Republican National Convention of 1864. Johnson was a War Democrat.

Presidential candidates	Party	Electoral vote	Popular vote	Vice-presidential candidates and party
Ulysses S. Grant	Republican	286	3,597,132	Henry Wilson—R
Horace Greeley	Dem., Liberal Rep.	(1)	2,834,125	B. Gratz Brown—D, LR—(47)
Thomas A. Hendricks	Democratic	42		Scattering—(19)
B. Gratz Brown	Dem., Liberal Rep.	18		Votes not counted—(14)
Charles J. Jenkins	Democratic	2		
David Davis	Democratic	1		
Votes not counted		17		
Rutherford B. Hayes	Republican	185	4,033,768	William A. Wheeler—R
Samuel J. Tilden	Democratic	184	4,285,992	Thomas A. Hendricks—D
Peter Cooper	Greenback	0	81,737	Samuel F. Cary—G
James A. Garfield ^a	Republican	214	4,449,053	Chester A. Arthur—R
Winfield S. Hancock	Democratic	155	4,442,035	William H. English—D
James B. Weaver	Greenback	0	308,578	B. J. Chambers—G
Grover Cleveland	Democratic	219	4,911,017	Thomas A. Hendricks—D
James G. Blaine	Republican	182	4,848,334	John A. Logan—R
Benjamin F. Butler	Greenback	0	175,370	A. M. West—G
John P. St. John	Prohibition	0	150,369	William Daniel—P
Benjamin Harrison	Republican	233	5,440,216	Levi P. Morton—R
Grover Cleveland	Democratic	168	5,538,233	A. G. Thurman—D
Clinton B. Fisk	Prohibition	0	249,506	John A. Brooks—P
Alson J. Streeter	Union Labor	0	146,935	Charles E. Cunningham—UL
Grover Cleveland	Democratic	277	5,556,918	Adlai E. Stevenson—D
Benjamin Harrison	Republican	145	5,176,108	Whitelaw Reid—R
James B. Weaver	People's ⁴	22	1,041,028	James G. Field—Peo
John Bidwell	Prohibition	0	264,133	James B. Cranfill—P
William McKinley	Republican	271	7,035,638	Garret A. Hobart—R
William J. Bryan	Dem., People's ⁴	176	6,467,946	Arthur Sewall—D—(149)
John M. Palmer	Natl. Dem.	0	133,148	Thomas E. Watson—Peo—(27)
Joshua Levering	Prohibition	0	132,007	Simon B. Buckner—ND
				Hale Johnson—P
William McKinley ⁵	Republican	292	7,219,530	Theodore Roosevelt—R
William J. Bryan	Dem., People's ⁴	155	6,358,071	Adlai E. Stevenson—D, Peo
John G. Woolley	Prohibition	0	208,914	Henry B. Metcalf—P
Eugene V. Debs	Social Democratic	0	94,768	Job Harriman—SD

Year	Presidential candidates	Party	Electoral vote	Popular vote ¹	Vice-presidential candidates and party
1904	Theodore Roosevelt	Republican	336	7,628,834	Charles W. Fairbanks
	Alton B. Parker	Democratic	140	5,084,491	Henry G. Davis—D
	Eugene V. Debs	Socialist	0	402,400	Benjamin Hanford—P
	Silas C. Swallow	Prohibition	0	258,536	George W. Carroll—P
	Thomas E. Watson	People's	0	117,183	Thomas H. Tibbles—P
1908	William H. Taft	Republican	321	7,679,006	James S. Sherman—D
	William J. Bryan	Democratic	162	6,409,106	John W. Kern—D
	Eugene V. Debs	Socialist	0	420,820	Benjamin Hanford—P
	Eugene W. Chafin	Prohibition	0	253,840	Aaron S. Watkins—P
	Thomas L. Hisgen	Independence	0	82,872	John T. Graves—P
1912	Woodrow Wilson	Democratic	435	6,286,214	Thomas R. Marshall—D
	Theodore Roosevelt	Progressive	88	4,126,020	Hiram Johnson—Prog
	William H. Taft	Republican	8	3,483,922	Nicholas M. Butler—R
	Eugene V. Debs	Socialist	0	897,011	Emil Seidel—S
	Eugene W. Chafin	Prohibition	0	206,275	Aaron S. Watkins—P
1916	Woodrow Wilson	Democratic	277	9,129,606	Thomas R. Marshall—D
	Charles E. Hughes	Republican	254	8,538,221	Charles W. Fairbanks—R
	A. L. Benson	Socialist	0	585,113	G. R. Kirkpatrick—S
	J. Frank Hanly	Prohibition	0	220,506	Ira Landrith—P
1920	Warren G. Harding ⁷	Republican	404	16,152,200	Calvin Coolidge—R
	James M. Cox	Democratic	127	9,147,353	Franklin D. Roosevelt—D
	Eugene V. Debs	Socialist	0	917,799	Seymour Stedman—S
	P. P. Christensen	Farmer-Labor	0	265,411	Max S. Hayes—FL
	Aaron S. Watkins	Prohibition	0	189,408	D. Leigh Colvin—P
1924	Calvin Coolidge	Republican	382	15,725,016	Charles G. Dawes—R
	John W. Davis	Democratic	136	8,385,586	Charles W. Bryan—D
	Robert M. LaFollette	Progressive, Socialist	13	4,822,856	Burton K. Wheeler—P
1928	Herbert Hoover	Republican	444	21,392,190	Charles Curtis—R
	Alfred E. Smith	Democratic	87	15,016,443	Joseph T. Robinson—D
1932	Franklin D. Roosevelt	Democratic	472	22,821,857	John N. Garner—D
	Herbert Hoover	Republican	59	15,761,841	Charles Curtis—R
1936	Franklin D. Roosevelt	Democratic	523	27,751,597	John N. Garner—D
	Alfred M. Landon	Republican	8	16,679,583	Frank Knox—R
1940	Franklin D. Roosevelt	Democratic	449	27,244,160	Henry A. Wallace—D
	Wendell L. Willkie	Republican	82	22,305,198	Charles L. McNary—R
1944	Franklin D. Roosevelt ⁸	Democratic	432	25,602,504	Harry S. Truman—D
	Thomas E. Dewey	Republican	99	22,006,285	John W. Bricker—R
1948	Harry S. Truman	Democratic	303	24,105,695	Alben W. Barkley—D
	Thomas E. Dewey	Republican	189	21,969,170	Earl Warren—R
	J. Strom Thurmond	States' Rights Dem.	39	1,169,021	Fielding L. Wright—R
	Henry A. Wallace	Progressive	0	1,156,103	Glen Taylor—Prog
1952	Dwight D. Eisenhower	Republican	442	33,824,351	Richard M. Nixon—R
	Adlai E. Stevenson	Democratic	89	27,314,987	John J. Sparkman—D
1956 ⁹	Dwight D. Eisenhower	Republican	457	35,581,003	Richard M. Nixon—R
	Adlai E. Stevenson	Democratic	73	26,031,322	Estes Kefauver—D
1960	John F. Kennedy	Democratic	For 1960 Presidential Election Results, see Table of Contents.		Lyndon B. Johnson—D
	Richard M. Nixon	Republican			Henry Cabot Lodge—R

NOTE: For minor-party candidates and vote for 1948-56, see succeeding pages.

¹ See page 559. ² See page 559. ³ Garfield died Sept. 19, 1881, and Arthur succeeded him Sept. 20. ⁴ The members of the People's party were known as Populists. ⁵ McKinley died Sept. 14, 1901, and Roosevelt succeeded him the same day. ⁶ James S. Sherman, Republican candidate for Vice President, died Oct. 30, 1912, and the Republican electoral votes were cast for Butler. ⁷ Harding died Aug. 2, 1923, and Coolidge succeeded him Aug. 3. ⁸ Roosevelt died Apr. 12, 1945, and Truman succeeded him the same day. ⁹ One electoral vote from Alabama was cast for Walter B. Jones.

Electoral Vote for President, 1888-1924

1888	1892	1896	1900	1904	1908	1912	1916	1920	1924
Harrison, Rep. Cleveland, Dem.	Cleveland, Dem. Harrison, Rep. Weaver, Peo.	McKinley, Rep. Bryan, Dem.	McKinley, Rep. Bryan, Dem.	Roosevelt, Rep. Parker, Dem.	Taft, Rep. Bryan, Dem.	Wilson, Dem. Taft, Rep. Roosevelt, Prog.	Wilson, Dem. Hughes, Rep.	Harding, Rep. Cox, Dem.	Coolidge, Rep. Davis, Dem. LaFollette, Prog.
10	11	11	11	11	11	12	12	12	12
7	8	8	8	9	9	3	3	3	3
8	8	8	9	10	10	9	9	9	9
3	4	4	4	5	5	2	13	13	13
6	6	6	6	7	7	6	6	6	6
3	3	3	3	3	3	7	7	7	7
4	4	4	4	5	5	3	3	3	3
12	13	13	13	13	13	6	6	6	6
	3	3	3	3	3	14	14	14	14
22	24	24	24	27	27	4	4	4	4
15	15	15	15	15	15	29	29	29	29
13	13	13	13	13	13	15	15	15	15
9	10	10	10	10	10	13	13	13	13
13	13	12	13	13	13	10	10	10	10
8	8	8	8	9	9	13	13	13	13
6	6	6	6	6	6	10	10	10	10
8	8	8	8	1	2	6	6	6	6
14	15	15	15	16	16	8	8	8	8
13	5	14	14	14	14	18	18	18	18
7	9	9	9	11	11	15	15	15	15
9	9	9	9	10	10	12	12	12	12
16	17	17	17	18	18	10	10	10	10
5	3	3	3	3	3	18	18	18	18
3	8	8	8	8	8	4	4	4	4
4	4	4	4	4	4	8	8	8	8
9	10	10	10	12	12	3	3	3	3
36	36	36	36	39	39	4	4	4	4
11	11	11	11	12	12	14	14	14	14
	1	3	3	4	4	3	3	3	3
23	1	23	23	23	23	10	10	10	10
3	3	4	4	4	4	5	5	5	5
30	32	32	32	34	34	3	3	3	3
4	4	4	4	4	4	38	38	38	38
9	9	9	9	9	9	5	5	5	5
12	4	4	4	4	4	9	9	9	9
13	15	15	15	18	18	5	5	5	5
4	4	4	4	4	4	12	12	12	12
12	12	12	12	12	12	4	4	4	4
6	6	6	6	7	7	4	4	4	4
11	12	12	12	12	13	7	7	7	7
	3	3	3	3	3	1	1	1	1
233	277	271	292	336	321	435	277	404	382
168	145	176	155	140	162	8	254	127	136
	22					88			13

For electoral votes by state from 1948 to 1956, see succeeding pages.

Presidential Election of 1948

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Democratic—Harry S. Truman, Missouri; Alben Barkley, Kentucky.

Republican—Thomas E. Dewey, New York; Earl Warren, California.

States' Rights Democratic—J. Strom Thurmond, South Carolina; Fielding L. Wright, Mississippi.

Progressive—Henry A. Wallace, Iowa; Glen H. Taylor, Idaho.

Socialist—Norman Thomas, New York; Tucker P. Smith, Michigan.

Prohibition—Claude A. Watson, California; Dale Learn, Pennsylvania.

Socialist Labor—Edward A. Teichert, Pennsylvania; Stephen Emery, New York.

State	Total	Dem.	Rep.	SR Dem.	Plur.	Electoral			Prog. ¹	O
						D	R	S		
Alabama.....	214,980	(9)	40,930	171,443	130,513	S	..	..	11	1,522
Arizona.....	177,065	95,251	77,597	..	17,654	D	4	..	..	3,310
Arkansas.....	242,475	149,659	50,959	40,068	98,700	D	9	..	..	751
California.....	4,021,538	1,913,134	1,895,269	1,228 ⁵	17,865	D	25	..	..	190,381
Colorado.....	515,237	267,288	239,714	..	27,574	D	6	..	..	6,115
Connecticut.....	883,518	423,297	437,754	..	14,457	R	..	8	..	13,713
Delaware.....	139,073	67,813	69,588	..	1,775	R	..	3	..	1,050
Florida.....	577,643	281,988	194,280	89,755	87,708	D	8	..	..	11,620
Georgia.....	418,760	254,646	76,691	85,055	169,591	D	12	..	..	1,636
Idaho.....	214,816	107,370	101,514	..	5,856	D	4	..	..	4,972
Illinois.....	3,984,046	1,994,715	1,961,103	..	33,612	D	28	..	..	..
Indiana.....	1,656,214	807,833	821,079	..	13,246	R	..	13	..	9,649
Iowa.....	1,038,264	522,380	494,018	..	28,362	D	10	..	..	12,125
Kansas.....	788,819	351,902	423,039	..	71,137	R	..	8	..	4,603
Kentucky.....	822,658	466,756	341,210	10,411	125,546	D	11	..	..	1,567
Louisiana.....	416,326	136,344	72,657	204,290	67,946	S	..	..	10	3,035
Maine.....	264,787	111,916	150,234	..	38,318	R	..	5	..	1,884
Maryland.....	596,735	286,521	294,814	2,476 ⁶	8,293	R	..	8	..	9,983
Massachusetts.....	2,155,347	1,151,788	909,307	..	242,418	D	16	..	..	38,157
Michigan.....	2,109,609	1,003,448	1,038,595	..	35,147	R	..	19	..	46,515
Minnesota.....	1,212,226	692,966 ⁸	483,617	..	209,349	D	11	..	..	27,866
Mississippi.....	192,190	19,384 ⁷	5,043 ⁸	167,538 ⁹	148,154	S	..	..	9	225
Missouri.....	1,578,628	917,315	655,039	..	262,276	D	15	..	..	3,998
Montana.....	224,278	119,071	96,770	..	22,301	D	4	..	..	7,313
Nebraska.....	488,939	224,165	264,774	..	40,609	R	..	6	..	..
Nevada.....	62,117	31,291	29,357	..	1,934	D	3	..	..	1,469
New Hampshire.....	231,440	107,995	121,299	7	13,304	R	..	4	..	1,970
New Jersey.....	1,949,555	895,455	981,124	..	85,669	R	..	16	..	42,683
New Mexico.....	185,767	105,464	80,303	..	25,161	D	4	..	..	..
New York.....	6,274,527	2,780,204 ¹⁰	2,841,163	..	60,959	R	..	47	..	509,559
North Carolina.....	791,209	459,070	258,572	69,652	200,498	D	14	..	..	3,915
North Dakota.....	220,716	95,812	115,139	374	19,327	R	..	4	..	8,391
Ohio.....	2,936,071	1,452,791	1,445,684	..	7,107	D	25	..	..	37,596
Oklahoma.....	721,599	452,782	268,817	..	183,965	D	10	..	..	..
Oregon.....	524,080	243,147	260,904	..	17,757	R	..	6	..	14,978
Pennsylvania.....	3,735,149	1,752,426	1,802,197	..	149,771	R	..	35	..	55,161
Rhode Island.....	326,098	188,619	134,892	..	53,727	D	4	..	..	2,587
South Carolina.....	142,571	34,423	5,386	102,607	68,184	S	..	..	8	154
South Dakota.....	250,105	117,653	129,651	..	11,998	R	..	4	..	2,801
Tennessee.....	550,283	270,402	202,914	73,815	67,488	D	11	..	1	1,864
Texas.....	1,147,245	750,700	282,240	106,909	468,460	D	23	..	..	3,764
Utah.....	276,305	149,151	124,402	..	24,749	D	4	..	..	2,679
Vermont.....	123,382	45,557	75,926	..	30,369	R	..	3	..	1,279
Virginia.....	419,256	200,786	172,070	43,393	28,716	D	11	..	..	2,047
Washington.....	905,059	476,165	386,315	..	89,850	D	..	8	..	31,692
West Virginia.....	748,750	429,188	316,251	..	112,937	D	8	..	..	3,311
Wisconsin.....	1,276,800	647,310	590,959	..	56,351	D	12	..	..	25,282
Wyoming.....	101,425	52,354	47,947	..	4,407	D	3	..	..	931
Total.....	48,833,680	24,105,695	21,969,170	1,169,021	2,136,525	D	303	189	39	1,156,103

¹ Independent Progressive in California; Peoples in Connecticut; Independent in Kansas, Mississippi, Ohio, South Dakota; American Labor in New York; People's Progressive in Wisconsin. ² Industrial Government in Minnesota; New York, Pennsylvania; Independent Socialist Labor in Wisconsin. ³ Breakdown of other votes: Socialist 139, Prohibition 103,216; Socialist Labor 29,061; Socialist Workers 13,613; Christian Nationalist 42; Greenback 5; Industrial 4; blank 145,320; write-in 1,683; scattering 1,666; void 71. ⁴ Not on ballot. ⁵ Write-in votes. ⁶ Includes Farmer-Labor votes. ⁷ National Democratic. ⁸ Contains 2,595 Republican and 2,448 Independent Republican votes. ⁹ Mississippi Democratic. ¹⁰ Includes 222,562 Liberal votes.

Presidential Election of 1952

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Republican—Dwight D. Eisenhower, New York; Richard M. Nixon, California.

Democratic—Adlai E. Stevenson, Illinois; John J. Sparkman, Alabama.

Progressive¹—Vincent Hallinan, California; Mrs. Charlotta A. Bass, New York.

Prohibition—Stuart Hamblen, California; Enoch A. Holtwick, Illinois.

Socialist Labor²—Eric Hass, New York; Stephen Emery, New York.

Socialist—Darlington Hoopes, Pennsylvania; Samuel H. Friedman, New York.

	Total	Rep.	Dem.	Plur.	Electoral R D	Prog. ¹	Prohib.	Soc. Lab. ²	Others ³
	426,120	149,231	275,075	125,844 D	11	....	1,814	....	....
	260,570	152,042	108,528	43,514 R	4	....	....	....	....
	404,800	177,155	226,300	49,145 D	8	....	886	1	458
	5,141,849	2,897,310	2,197,548	699,762 R	32	24,106	15,653	....	7,232
	630,103	379,782	245,504	134,278 R	6	1,919	....	352	2,546
	1,096,911	611,012	481,649	129,363 R	8	....	....	535	3,715
	174,025	90,059	83,315	6,744 R	3	155	234	242	20
	989,337	544,036	444,950	99,086 R	10	....	....	....	351
	655,803	198,979	456,823	257,844 D	12	....	....	....	1
	276,231	180,707	95,081	85,626 R	4	443	....	....	....
	4,481,058	2,457,327	2,013,920	443,407 R	27	....	....	9,363	448
	1,955,325	1,136,259	801,530	334,729 R	13	1,222	15,335	979	....
	1,268,773	808,906	451,513	357,393 R	10	5,085	2,882	139	248
	896,166	616,302	273,296	343,006 R	8	....	6,038	....	530
	993,148	495,029	495,729	700 D	10	336	1,161	893	....
	651,952	306,925	345,027	38,102 D	10	....	....	....	....
	351,786	232,353	118,806	113,547 R	5	332	....	156	139
	902,074	499,424	395,337	104,087 R	9	7,313	....	....	....
	2,383,398	1,292,325	1,083,525	208,800 R	16	4,636	886	1,957	69
	2,798,592	1,551,529	1,230,657	320,872 R	20	3,922	10,331	1,495	658
	1,379,483	763,211	608,458 ⁴	154,753 R	11	2,666	2,147	2,383	618
	285,532	(⁵)	172,566	59,600 D	8	....	....	....	112,966
	1,892,062	959,429	929,830	29,599 R	13	987	885	169	762
	265,037	157,394	106,213	51,181 R	4	723	548	....	159
	609,660	421,603	188,057	233,546 R	6	....	....	....	....
	82,190	50,502	31,688	18,814 R	3	....	....	....	....
	272,950	166,287	106,663	59,624 R	4	....	....	....	....
	2,419,554	1,374,613	1,015,902	358,711 R	16	5,589	989	5,815	16,646
	238,808	132,170	105,661	26,509 R	4	....	297	35	445
	7,128,241	3,952,815	3,104,601 ⁶	848,214 R	45	64,211	....	1,560	5,054
	1,210,910	558,107	652,803	94,696 D	14	....	....	....	....
	270,127	191,712	76,694	115,018 R	4	344	302	....	1,075
	3,700,758	2,100,456	1,600,302	500,154 R	25	....	....	....	....
	948,984	518,045	430,939	87,106 R	8	....	....	....	....
	695,059	420,815	270,579	150,236 R	6	....	....	....	3,665
	4,580,717	2,415,789	2,146,269	269,520 R	32	4,200	8,771	1,347	4,341
	414,498	210,935	203,293	7,642 R	4	187	....	83	....
	341,086	168,082 ⁷	173,004	4,922 D	8	....	....	....	....
	294,283	203,857	90,426	113,431 R	4	....	....	....	....
	892,553	446,147	443,710	2,437 R	11	885	1,432	....	379
	2,076,006	1,102,878	969,288	133,590 R	24	294	1,983	....	1,563
	329,554	194,190	135,364	58,828 R	4	....	....	....	....
	153,539	109,717	43,355	66,362 R	3	282	....	....	185
	619,689	349,037	268,677	80,360 R	12	311	....	1,160	504
	1,102,708	599,107	492,845	106,262 R	9	2,460	....	633	7,663
	873,548	419,970	453,578	33,608 D	8	....	....	....	....
	1,607,370	979,744	622,175	357,569 R	12	....	....	....	5,451
	129,251	81,047	47,934	33,113 R	3	....	194	36	40
	61,551,978	33,824,351	27,314,987 ⁸	6,509,364 R	442	89	132,608	72,768	29,333
								177,931	

nt Progressive in California; Peace Progressive in Massachusetts; American Labor in New York. ³ In-
 nment in Minnesota, New York and Pennsylvania. ⁴ Breakdown of Other votes: Independent (pledged
 candidate in Miss.), 112,966; Socialist, 18,322; Christian Nationalist, 10,557; Socialist Workers, 8,956;
 : Poor Man's, 4,203; scattering, 4,040; Independent, 3,665; Constitution, 2,911; Vincent Hallinan
 n Wis.), 2,174; People's party of Connecticut, 1,466; Farrell Dobbs (Independent in Wis.), 1,350; Darl-
 (Independent in Wis.), 1,157; Eric Hass (Independent in Wis.), 770; Social Democrat, 504; America
 dependent Progressive, 225; Liberty, 1. ⁶ Democratic-Farmer Labor votes. ⁷ 112,966 Independent
 dged to the Republican candidate; these are shown as Other votes. ⁸ Includes 416,711 Liberal votes,
 289 votes for separate set of electors for Republican candidates by petition.

Presidential Election of 1956

(For 1960 presidential election, see Table of Contents.)

CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Republican—Dwight D. Eisenhower, New York; Richard M. Nixon, California.
Democratic—Adlai E. Stevenson, Illinois; Estes Kefauver, Tennessee.
Prohibition—Enoch A. Holtwick, Illinois; Edward M. Cooper, California.
Socialist—Darlington Hoopes, Pennsylvania; Samuel H. Friedman, New York.
Socialist Labor—Eric Hass, New York; Georgia Cozzini, Wisconsin.
Socialist Workers—Farrell Dobbs, New York; Myra Tanner Weiss, New York.

State	Total	Rep.	Dem.	Plur.	Electoral vote		Distribution of votes at National Convention
					R	D	
Alabama.....	496,861	195,694	280,844	85,150 D	..	10 ¹	21
Arizona.....	290,173	176,990	112,880	64,110 R	4	..	14
Arkansas.....	406,572	186,287	213,277	26,990 D	..	8	16
California.....	5,466,355	3,027,668	2,420,135	607,533 R	32	..	70
Colorado.....	663,074	394,479	263,997	130,482 R	6	..	18
Connecticut.....	1,117,121	711,837	405,079	306,758 R	8	..	22
Delaware.....	177,988	98,057	79,421	18,636 R	3	..	12
Florida.....	1,124,220	643,849	480,371	163,478 R	10	..	26
Georgia.....	668,920	222,778	444,388	221,610 D	..	12	23
Idaho.....	272,989	166,979	105,868	61,111 R	4	..	14
Illinois.....	4,407,407	2,623,327	1,775,682	847,645 R	27	..	60
Indiana.....	1,974,607	1,182,811	783,908	398,903 R	13	..	32
Iowa.....	1,234,564	729,187	501,858	227,329 R	10	..	26
Kansas.....	866,243	566,878	296,317	270,561 R	8	..	22
Kentucky.....	1,053,805	572,192	476,453	95,739 R	10	..	26
Louisiana.....	617,544	329,047	243,977	85,070 R	10	..	20
Maine.....	351,706	249,238	102,468	146,770 R	5	..	16
Maryland.....	932,351	559,738	372,613	187,125 R	9	..	24
Massachusetts.....	2,348,506	1,393,197	948,190	445,007 R	16	..	38
Michigan.....	3,080,468	1,713,647	1,359,998	353,749 R	20	..	46
Minnesota.....	1,340,005	719,302	617,525	101,777 R	11	..	28
Mississippi.....	248,149	56,372	144,498	88,126 D	..	8	15
Missouri.....	1,832,572	914,299	918,273	3,974 D	..	13	32
Montana.....	271,171	154,933	116,238	38,695 R	4	..	18
Nebraska.....	577,137	378,108	199,029	179,079 R	6	..	14
Nevada.....	96,689	56,049	40,640	15,409 R	3	..	12
New Hampshire.....	266,994	176,519	90,364	86,155 R	4	..	14
New Jersey.....	2,484,312	1,606,942	850,337	756,605 R	16	..	38
New Mexico.....	253,926	146,788	106,098	40,690 R	4	..	14
New York.....	7,093,336	4,340,340	2,750,769 ²	1,589,571 R	45	..	96
North Carolina.....	1,165,592	575,062	590,530	15,468 D	..	14	28
North Dakota.....	253,991	156,766	96,742	60,024 R	4	..	14
Ohio.....	3,702,265	2,262,610	1,439,655	822,955 R	25	..	56
Oklahoma.....	859,350	473,769	385,581	88,188 R	8	..	22
Oregon.....	735,597	406,393	329,204	77,189 R	6	..	18
Pennsylvania.....	4,576,503	2,585,252	1,981,769	603,483 R	32	..	70
Rhode Island.....	387,609	225,819	161,790	64,029 R	4	..	14
South Carolina.....	300,583 ³	75,700	136,372	60,672 D	..	8	16
South Dakota.....	293,857	171,569	122,288	49,281 R	4	..	14
Tennessee.....	939,404	462,288	456,507	5,781 R	11	..	28
Texas.....	1,955,168	1,080,619	859,958	220,661 R	24	..	54
Utah.....	333,995	215,631	118,364	97,267 R	4	..	14
Vermont.....	152,978	110,390	42,549	67,841 R	3	..	12
Virginia.....	697,978	386,459	267,760	118,699 R	12	..	30
Washington.....	1,150,889	620,430	523,002	97,428 R	9	..	24
West Virginia.....	830,831	449,297	381,534	67,763 R	8	..	16
Wisconsin.....	1,550,558	954,844	586,768	368,076 R	12	..	30
Wyoming.....	124,127	74,573	49,554	25,019 R	3	..	12
Total.....	62,027,040	35,581,003	26,031,322	9,549,681 R	457	73 ¹	1,323 ³

¹ Alabama's 11th electoral vote was cast for Walter B. Jones of Alabama. ² Includes 292,557 Liberal-party

* Includes 88,509 votes for electors nominated by petition.

³ Note: This total includes National Convention votes allocated to the District of Columbia and United States

territories as follows:

Republican: Alaska, 4; District of Columbia, 6; Hawaii, 10; Puerto Rico, 3; Virgin Islands, 1.
 Democratic: Alaska, 6; District of Columbia, 6; Hawaii, 6; Puerto Rico, 6; Canal Zone, 3; Virgin Islands, 3.

Qualifications for Voting in the 50 States

Minimum voting age is 18 in Georgia and Kentucky, 19 in Alaska, and 20 in Hawaii.
In all other states, the minimum age is 21.)

Source: Questionnaires to the states.

State	Minimum length of U. S. citizenship	Residence ¹			Literacy test	Poll tax ²
		State	County	District		
.....	1 yr.	6 mo.	3 mo. ³	Yes	\$1.50 ¹⁴
.....	1 yr.	.....	30 da.	.....	.....
.....	1 yr.	1 yr.	30 da.	30 da.	Yes	.....
.....	1 yr.	1 yr.	6 mo.	30 da. ⁴	.....	1.00
.....	90 da.	1 yr. ²³	90 da.	54 da. ⁴	Yes	.....
.....	1 yr.	3 mo.	30 da. ⁵	.....	.....
.....	1 yr.	.....	6 mo. ⁶	Yes	.....
.....	1 yr.	3 mo.	30 da.	Yes	.....
.....	1 yr.	6 mo.	.....	.....	.....
.....	1 yr.	6 mo.	6 mo.	Yes	.....
.....	1 yr.	.....	3 mo.	.....	.....
.....	6 mo.	30 da.	.....	.....	.....
.....	1 yr.	3 mo.	30 da.	.....	.....
.....	6 mo.	2 mo. ⁹	30 da. ⁴	.....	.....
.....	6 mo.	60 da.	10 da. ⁴	.....	.....
.....	6 mo.	.....	30 da. ¹⁰	.....	.....
.....	1 yr.	6 mo.	60 da. ⁴	.....	.....
.....	1 yr.	1 yr. ¹¹	3 mo. ¹⁹	Yes	.....
.....	6 mo.	.....	3 mo. ⁶	Yes	.....
.....	1 yr.	6 mo.	6 mo.	.....	.....
.....	1 yr.	.....	6 mo. ⁶	Yes	.....
.....	6 mo.	.....	30 da. ^{6,24}	.....	.....
.....	3 mo.	6 mo.	.....	30 da.	.....	.....
.....	2 yr.	1 yr.	1 yr.	(¹²)	2.00
.....	1 yr.	60 da.	60 da.	.....	.....
.....	1 yr.	30 da.	30 da. ⁸	.....	.....
.....	6 mo.	40 da.	10 da.	.....	.....
.....	6 mo.	30 da.	10 da. ⁴	.....	.....
.....	6 mo.	.....	6 mo. ⁶	Yes	.....
.....	6 mo.	60 da.	.....	.....	.....
.....	1 yr.	3 mo.	30 da. ⁴	.....	.....
.....	90 da.	1 yr.	4 mo.	30 da.	Yes	.....
.....	1 yr.	4 mo.	4 mo.	Yes	.....
.....	1 yr.	3 mo.	30 da. ⁴	.....	.....
.....	1 yr.	40 da.	40 da. ⁴	.....	.....
.....	1 yr.	6 mo.	30 da. ⁴	.....	.....
.....	6 mo.	30 da. ²²	30 da. ^{4,22}	Yes	.....
.....	1 mo.	1 yr. ¹³	.....	2 mo.	.....	.....
.....	1 yr.	1 yr.	.....	6 mo. ⁶	.....	.....
.....	2 yr.	2 yr.	1 yr.	4 mo.	.....	(¹⁹)
.....	5 yr.	1 yr.	3 mo. ⁷	30 da. ^{4,7}	.....	.....
.....	1 yr.	3 mo.	30 da. ^{3,24}	.....	.....
.....	1 yr.	6 mo.	.....	.....	1.75 ²¹
.....	90 da.	1 yr.	4 mo.	60 da. ⁴	.....	.....
.....	1 yr.	.....	3 mo. ^{6,18}	.....	.....
.....	1 yr.	6 mo. ¹⁸	30 da. ⁴	Yes	1.50
.....	1 yr.	3 mo.	30 da. ¹⁷	Yes	.....
.....	1 yr.	2 mo.	.....	.....	.....
.....	1 yr. ²³	.....	10 da.	.....	.....
.....	1 yr.	60 da.	10 da.	(¹²)	.....

on of all or part of the voters is required in most states. ² Annual levy. Although poll (or head) taxes several other states, those listed make payment of the tax a condition for voting. ³ Precinct or ward. City or town, and 15 days in precinct. ⁶ City or town. ⁷ A person living in a new precinct or county the period required may vote at either his old or new residence, provided he was qualified to vote at his ⁸ Precinct; 6 mo. in city or town. ⁹ Township. ¹⁰ Township or ward. ¹¹ Parish. ¹² Must be able to read and/or write any section of state constitution. ¹³ 6 months if previously qualified elector or naturalized state. ¹⁴ 1953 act makes poll tax noncumulative except for 2 years preceding election in which elector may vote in national and state-wide elections without 30 days local residence. ¹⁵ County, city, or town. ¹⁶ To qualify to vote for representatives to general assembly or justices. ¹⁷ County, city, or town. ¹⁸ Repealed in 1945. ¹⁹ Precinct, municipality 4 mo. ²⁰ A person must take free-qualification for voting. ²¹ \$1.50 levied by state; 25 cents levied by most counties, but not all. ²² To qualify officials requires 30 days residence in the county; for municipal officials, 30 days in the municipality. ²³ Residents of less than 30 days may vote in presidential elections if eligible to vote elsewhere prior to moving. ²⁴ If person moves during period, he has to vote in old location.

Presidents and Vice Presidents of the U. S.*

(See footnotes on top of opposite page.)

Presidents & (parties) ¹	Born	State of birth	Religion	Died	Term	Age at inaug.	Age at death	Vice Presidents ²	State of birth
1. Washington (F) ³	Feb. 22, 1732	Va.	Episcopalian	Dec. 14, 1799	1789-1797	57	67	1. John Adams	Mass.
2. J. Adams (F)	Oct. 30, 1735	Mass.	Unitarian	July 4, 1826	1797-1801	61	90	2. Thomas Jefferson ⁴	Va.
3. Jefferson (DR)	Apr. 13, 1743	Va.	Deist	July 4, 1826	1801-1809	57	83	3. Aaron Burr	N. J.
4. Madison (DR)	Mar. 16, 1751	Va.	Episcopalian	June 28, 1836	1809-1817	57	85	4. George Clinton	N. Y.
5. Monroe (DR)	Apr. 28, 1758	Va.	Episcopalian	July 4, 1831	1817-1825	58	73	5. Elbridge Gerry ⁵	Mass.
6. J. Q. Adams (DR)	July 11, 1767	Mass.	Unitarian	Feb. 23, 1848	1825-1829	57	80	6. Daniel D. Tompkins	N. Y.
7. Jackson (D)	Mar. 15, 1767	S. C.	Presbyterian	June 8, 1845	1829-1837	61	78	7. John C. Calhoun ⁷	S. C.
8. Van Buren (D)	Dec. 5, 1782	N. Y.	Reformed Dutch	July 24, 1862	1837-1841	54	79	8. Martin Van Buren	N. Y.
9. W. H. Harrison (W) ⁸	Feb. 9, 1773	Va.	Episcopalian	Apr. 4, 1841	1841-1841	68	68	9. Richard M. Johnson	Ky.
10. Tyler (W)	Mar. 29, 1790	Va.	Episcopalian	Jan. 18, 1862	1841-1845	51	71	10. John Tyler	Va.
11. Polk (D)	Nov. 2, 1795	N. C.	Methodist	June 15, 1849	1845-1849	49	53	11. George M. Dallas	Pa.
12. Taylor (W) ⁹	Nov. 24, 1784	Va.	Episcopalian	July 9, 1850	1849-1850	64	65	12. Millard Fillmore	N. Y.
13. Fillmore (W)	Jan. 7, 1800	N. Y.	Episcopalian	Mar. 8, 1874	1850-1853	50	74	13. William R. King ⁹	N. C.
14. Pierce (D)	Nov. 23, 1804	N. H.	Episcopalian	Oct. 8, 1869	1853-1857	48	64	14. John C. Breckinridge	Ky.
15. Buchanan (D)	Apr. 23, 1791	Pa.	Presbyterian	June 1, 1868	1857-1861	65	77	15. Hannibal Hamlin	Maine
16. Lincoln (R) ¹⁰	Feb. 12, 1809	Ky.	Liberal	Apr. 15, 1865	1861-1865	52	56	16. Andrew Johnson ¹⁷	N. C.
17. Johnson (U) ¹⁷	Dec. 29, 1808	N. C.	(¹⁶)	July 31, 1875	1865-1869	56	66	17. Schuyler Colfax	N. Y.
18. Grant (R)	Apr. 27, 1822	Ohio	Methodist	July 23, 1885	1869-1877	46	63	18. Henry Wilson ¹¹	N. H.
19. Hayes (R)	Oct. 4, 1822	Ohio	Methodist	Jan. 17, 1893	1877-1881	54	70	19. William A. Wheeler	N. Y.
20. Garfield (R) ¹²	Nov. 19, 1831	Ohio	Disciples of Christ	Sept. 19, 1881	1881-1881	49	49	20. Chester A. Arthur	Vt.
21. Arthur (R)	Oct. 5, 1830	Vt.	Episcopalian	Nov. 18, 1886	1881-1885	50	56	21. Thomas A. Hendricks ¹²	Ohio
22. Cleveland (D)	Mar. 18, 1837	N. J.	Presbyterian	June 24, 1908	1885-1889	47	71	22. Levi P. Morton	Vt.
23. B. Harrison (R)	Aug. 20, 1833	Ohio	Presbyterian	Mar. 13, 1901	1889-1893	55	67	23. Adlai E. Stevenson	Ky.
24. Cleveland (D)	Jan. 29, 1843	Ohio	Methodist	Sept. 14, 1901	1893-1897	54	58	24. Garret A. Hobart ¹³	N. J.
25. McKinley (R) ¹⁴	Oct. 27, 1858	N. Y.	Reformed Dutch	Jan. 6, 1919	1901-1909	42	60	25. Theodore Roosevelt	N. Y.
26. T. Roosevelt (R)	Sept. 15, 1857	Ohio	Unitarian	Mar. 8, 1930	1909-1913	51	72	26. Charles W. Fairbanks	Ohio
27. Taft (R)	Dec. 28, 1856	Va.	Presbyterian	Feb. 3, 1924	1913-1921	56	67	27. James S. Sherman ¹⁵	N. Y.
28. Wilson (D)	Nov. 2, 1865	Ohio	Baptist	Aug. 2, 1923	1921-1923	55	57	28. Thomas R. Marshall	Ind.
29. Harding (R) ¹⁵	July 4, 1872	Vt.	Congregationalist	Jan. 5, 1933	1923-1929	51	60	29. Calvin Coolidge	Vt.
30. Coolidge (R)	Aug. 10, 1874	Iowa	Quaker	Apr. 12, 1945	1929-1933	51	63	30. Charles G. Dawes	Ohio
31. Hoover (R)	Jan. 30, 1882	N. Y.	Episcopalian		1933-1945	54		31. Charles Curtis	Kans.
32. F. D. Roosevelt (D) ¹⁶								32. John N. Garner	Tex.
								33. Henry A. Wallace	Iowa
								34. Harry S. Truman	Mo.

Footnotes for Table on Preceding Page

deralist; DR—Democratic-Republican; D—Democratic; W—Whig; R—Republican; U—Union. ² Same President, except as indicated. ³ No party for first election. The party system in the U. S. made its appearance Washington's first term. ⁴ Democratic-Republican. ⁵ Died in office Apr. 20, 1812. ⁶ Died in office, 1814. ⁷ Resigned Dec. 28, 1832, to become U. S. Senator. ⁸ Died in office. ⁹ Died in office Apr. 18, 1853, office (shot Apr. 14 by John Wilkes Booth). ¹⁰ Died in office Nov. 22, 1875. ¹¹ Died in office (shot July 2 s J. Guiteau). ¹² Died in office Nov. 25, 1885. ¹³ Died in office (shot Sept. 6 by Leon F. Czolgosz). ¹⁴ Died Nov. 21, 1899. ¹⁵ Died in office Oct. 30, 1912. ¹⁶ The Republican National Convention of 1864 adopted Union party. It renominated Lincoln for President; for Vice President it nominated Johnson, a War Democrat. Frequently listed as a Republican Vice President and President, Johnson undoubtedly considered himself member of the Union party. When that party broke apart after 1868, he returned to the Democratic party. He was not a professed church member; however, he admired the Baptist principles of church government. For information on Newly Elected President, see Index.

Wives and Children of the Presidents of the United States*

	Wife's name	Year and place of wife's birth	Married	Wife Died	Children of President**	
					Sons	Daughters
	Mrs. Martha Dandridge Custis	1732, Va.	1759	1802	..	..
	Abigail Smith	1744, Mass.	1764	1818	3	2
	Mrs. Martha Wayles Skelton	1748, Va.	1772	1782	1	5
	Mrs. Dorothy "Dolly" Payne Todd	1768, N. C.	1794	1849	..	..
	Eliza Kortright	1768, N. Y.	1786	1830	..	2
	Louisa Catherine Johnson	1775, England	1797	1852	3	1
	Mrs. Rachel Donelson Robards	1767, Va.	1791	1828	..	..
	Hannah Hoes	1783, N. Y.	1807	1819	4	..
son	Anna Symmes	1775, N. J.	1795	1864	6	4
	Letitia Christian	1790, Va.	1813	1842	3	4
	Julia Gardiner	1820, N. Y.	1844	1889	5	2
	Sarah Childress	1803, Tenn.	1824	1891	..	..
	Margaret Smith	1788, Md.	1810	1852	1	5
	Abigail Powers	1798, N. Y.	1826	1853	1	1
	Mrs. Caroline Carmichael McIntosh	1813, N. J.	1858	1881	..	..
	Jane Means Appleton	1806, N. H.	1834	1863	3	..
	(Unmarried)	....	....	....	..	..
	Mary Todd	1818, Ky.	1842	1882	4	..
	Eliza McCordle	1810, Tenn.	1827	1876	3	2
	Julia Dent	1826, Mo.	1848	1902	3	1
	Lucy Ware Webb	1831, Ohio	1852	1889	7	1
	Lucretia Rudolph	1832, Ohio	1858	1918	5	2
	Ellen Lewis Herndon	1837, Va.	1859	1880	2	1
	Frances Folsom	1864, N. Y.	1886	1947	2	3
	Caroline Lavinia Scott	1832, Ohio	1853	1892	1	1
	Mrs. Mary Scott Lord Dimmick	1858, Pa.	1896	1948	..	1
	Ida Saxton	1847, Ohio	1871	1907	..	2
	Alice Hathaway Lee	1861, Mass.	1880	1884	..	1
	Edith Kermit Carow	1861, Conn.	1886	1948	4	1
	Helen Herron	1861, Ohio	1886	1943	2	1
	Ellen Louise Axson	1860, Ga.	1885	1914	..	3
	Mrs. Edith Bolling Galt	1872, Va.	1915	....	..	..
	Mrs. Florence Kling DeWolfe	1860, Ohio	1891	1924	..	..
	Grace Anna Goodhue	1879, Vt.	1905	1957	2	..
	Lou Henry	1875, Iowa	1899	1944	2	..
volt	Anna Eleanor Roosevelt	1884, N. Y.	1905	....	5	1
	Bess Wallace	1885, Mo.	1919	....	..	1
	Mamie Geneva Doud	1896, Iowa	1916	....	2	..

* For Information on Newly Elected President, see Index.
 ** Includes children who died in infancy.

Annual Salaries of Federal Officials

Source: U. S. Department of the Treasury

of the U. S.	\$100,000 ¹	Secretaries of the Army, Navy, Air Force.	22,000
ent of the U. S.	35,000 ²	Senators and Representatives.	22,500
members.	25,000	Speaker of the House.	35,000 ²
aries of executive departments.	21,000 ³	Chief Justice of the Supreme Court.	35,500
retary of Defense.	22,500	Associate Justices of the Supreme Court.	35,000

taxable \$50,000 for expenses and a nontaxable sum (not to exceed \$40,000 a year) for traveling and official expenses. ² Plus taxable \$10,000 for expenses. ³ Except Undersecretary of State, who receives \$22,500. All salaries shown above are taxable.

U. S. Cabinet Members with Dates of Appointment

Although the Constitution made no provision for a President's advisory group, the heads of the three executive departments (State, Treasury and War) and the Attorney General were organized by Washington into such a group; and by about 1793, the name "Cabinet" was applied to it. With the exception of the Attorney General up to 1870 and the Postmaster General from 1829-72, Cabinet members have been heads of executive departments, although other government officials may be called to sit in whenever necessary.

A Cabinet member is appointed by the President, subject to the confirmation of the Senate; and as his term is not fixed, he may be replaced at any time by the

President. At a change in Administration it is customary for him to tender his resignation, but he remains in office until his successor is appointed.

The table of Cabinet members lists those members who actually served, being duly commissioned. It does not include ad-interim appointments or where the appointee declined the office after appointment.

The dates shown are those of appointment. "Contd" indicates that the member continued from the previous Administration for a substantial amount of time. Those cases where the term continued only a few days, until a new appointment could be made, are not indicated.

WASHINGTON

Secretary of State
Thomas Jefferson..... 1789
Edmund Randolph..... 1794
Timothy Pickering..... 1795

Secretary of the Treasury
Alexander Hamilton.... 1789
Oliver Wolcott, Jr..... 1795

Secretary of War
Henry Knox..... 1789
Timothy Pickering..... 1795
James McHenry..... 1796

Attorney General
Edmund Randolph..... 1789
William Bradford..... 1794
Charles Lee..... 1795

J. ADAMS

Secretary of State
Timothy Pickering.... Contd
John Marshall..... 1800

Secretary of the Treasury
Oliver Wolcott, Jr.... Contd
Samuel Dexter..... 1801

Secretary of War
James McHenry..... Contd
Samuel Dexter..... 1800

Attorney General
Charles Lee..... Contd

Secretary of the Navy
Benjamin Stoddert... 1798

JEFFERSON

Secretary of State
James Madison..... 1801

Secretary of the Treasury
Samuel Dexter..... Contd
Albert Gallatin..... 1801

Secretary of War
Henry Dearborn..... 1801

Attorney General

Levi Lincoln..... 1801
Robert Smith..... 1805
John Breckinridge.... 1805
Caesar A. Rodney..... 1807

Secretary of the Navy

Benjamin Stoddert... Contd
Robert Smith..... 1801

MADISON

Secretary of State

Robert Smith..... 1809
James Monroe..... 1811

Secretary of the Treasury

Albert Gallatin..... Contd
George W. Campbell... 1814
Alexander J. Dallas... 1814
William H. Crawford... 1816

Secretary of War

William Eustis..... 1809
John Armstrong..... 1813
James Monroe..... 1814
William H. Crawford... 1815

Attorney General

Caesar A. Rodney.... Contd
William Pinckney..... 1811
Richard Rush..... 1814

Secretary of the Navy

Paul Hamilton..... 1809
William Jones..... 1813
B. W. Crowninshield... 1814

MONROE

Secretary of State

John Quincy Adams... 1817

Secretary of the Treasury

William H. Crawford.. Contd

Secretary of War

John C. Calhoun..... 1817

Attorney General

Richard Rush..... Contd
William Wirt..... 1817

Secretary of the Navy

B. W. Crowninshield.. Contd
Smith Thompson..... 1818
Samuel L. Southard... 1823

J. Q. ADAMS

Secretary of State

Henry Clay..... 1825

Secretary of the Treasury

Richard Rush..... 1825

Secretary of War

James Barbour..... 1825
Peter B. Porter..... 1828

Attorney General

William Wirt..... Contd

Secretary of the Navy

Samuel L. Southard.. Contd

JACKSON

Secretary of State

Martin Van Buren.... 1829
Edward Livingston.... 1831
Louis McLane..... 1833
John Forsyth..... 1834

Secretary of the Treasury

Samuel D. Ingham.... 1829
Louis McLane..... 1831
William J. Duane..... 1833
Roger B. Taney..... 1833
Levi Woodbury..... 1834

Secretary of War

John H. Eaton..... 1829
Lewis Cass..... 1831

Attorney General

John M. Berrien..... 1829
Roger B. Taney..... 1831
Benjamin F. Butler... 1833

Postmaster General

William T. Barry..... 1829
Amos Kendall..... 1835

Secretary of the Navy

John Branch.....
Levi Woodbury.....
Mahlon Dickerson....

VAN BUREN

Secretary of State

John Forsyth.....

Secretary of the Treasury

Levi Woodbury.....

Secretary of War

Joel R. Poinsett....

Attorney General

Benjamin F. Butler..
Felix Grundy.....
Henry D. Gilpin.....

Postmaster General

Amos Kendall.....
John M. Niles.....

Secretary of the Navy

Mahlon Dickerson..
James K. Paulding...

W. HARRISON

Secretary of State

Daniel Webster.....

Secretary of the Treasury

Thomas Ewing.....

Secretary of War

John Bell.....

Attorney General

John J. Crittenden...

Postmaster General

Francis Granger....

Secretary of the Navy

George E. Badger...

YLER

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n..... 1845
rd..... 1846
..... 1848
ter General
..... 1845

of the Navy

off..... 1845

n..... 1846

YLOR

ry of State
lon..... 1849
of the Treasury
eredith..... 1849
ry of War
wford..... 1849
ey General
son..... 1849
ter General
er..... 1849
of the Navy
eston..... 1849

Secretary of the Interior

Thomas Ewing..... 1849

FILLMORE

Secretary of State

Daniel Webster..... 1850

Edward Everett..... 1852

Secretary of the Treasury

Thomas Corwin..... 1850

Secretary of War

Charles M. Conrad..... 1850

Attorney General

John J. Crittenden..... 1850

Postmaster General

Nathan K. Hall..... 1850

Samuel D. Hubbard..... 1852

Secretary of the Navy

William A. Graham..... 1850

John P. Kennedy..... 1852

Secretary of the Interior

Thos. M. T. McKennan..... 1850

Alex. H. H. Stuart..... 1850

PIERCE

Secretary of State

William L. Marcy..... 1853

Secretary of the Treasury

James Guthrie..... 1853

Secretary of War

Jefferson Davis..... 1853

Attorney General

Caleb Cushing..... 1853

Postmaster General

James Campbell..... 1853

Secretary of the Navy

James C. Dobbin..... 1853

Secretary of the Interior

Robert McClelland..... 1853

BUCHANAN

Secretary of State

Lewis Cass..... 1857

Jeremiah S. Black..... 1860

Secretary of the Treasury

Howell Cobb..... 1857

Philip F. Thomas..... 1860

John A. Dix..... 1861

Secretary of War

John B. Floyd..... 1857

Joseph Holt..... 1861

Attorney General

Jeremiah S. Black..... 1857

Edwin M. Stanton..... 1860

Postmaster General

Aaron V. Brown..... 1857

Joseph Holt..... 1859

Horatio King..... 1861

Secretary of the Navy

Isaac Toucey..... 1857

Secretary of the Interior

Jacob Thompson..... 1857

LINCOLN

Secretary of State

William H. Seward..... 1861

Secretary of the Treasury

Salmon P. Chase..... 1861

William P. Fessenden..... 1864

Hugh McCulloch..... 1865

Secretary of War

Simon Cameron..... 1861

Edwin M. Stanton..... 1862

Attorney General

Edward Bates..... 1861

James Speed..... 1864

Postmaster General

Montgomery Blair..... 1861

William Dennison..... 1864

Secretary of the Navy

Gideon Welles..... 1861

Secretary of the Interior

Caleb B. Smith..... 1861

John P. Usher..... 1863

JOHNSON

Secretary of State

William H. Seward..... Contd

Secretary of the Treasury

Hugh McCulloch..... Contd

Secretary of War

Edwin M. Stanton..... Contd

John M. Schofield..... 1868

Attorney General

James Speed..... Contd

Henry Stanbery..... 1866

William M. Evarts..... 1868

Postmaster General

William Dennison..... Contd

Alexander W. Randall..... 1866

Secretary of the Navy

Gideon Welles..... Contd

Secretary of the Interior

John P. Usher..... Contd

James Harlan..... 1865

Orville H. Browning..... 1866

GRANT

Secretary of State

Ellihu B. Washburne..... 1869

Hamilton Fish..... 1869

Secretary of the Treasury

George S. Boutwell..... 1869

William A. Richardson..... 1873

Benjamin H. Bristow..... 1874

Lot M. Morrill..... 1876

Secretary of War

John A. Rawlins..... 1866

William T. Sherman..... 1869

William W. Belknap..... 1869

Alphonso Taft..... 1879

James D. Cameron..... 1876

Attorney General

Ebenezer R. Hoar..... 1869

Amos T. Akerman..... 1870

George H. Williams..... 1871

Edwards Pierpont..... 1875

Alphonso Taft..... 1876

Postmaster General

John A. J. Creswell..... 1869

James W. Marshall..... 1874

Marshall Jewell..... 1874

James N. Tyner..... 1876

Secretary of the Navy

Adolph E. Borie..... 1869

George M. Robeson..... 1869

Secretary of the Interior

Jacob D. Cox..... 1869

Columbus Delano..... 1870

Zachariah Chandler..... 1875

HAYES

Secretary of State

William M. Evarts..... 1877

Secretary of the Treasury

John Sherman..... 1877

Secretary of War

George W. McCrary..... 1877

Alexander Ramsey..... 1879

Attorney General

Charles Devens..... 1877

Postmaster General

David M. Key..... 1877

Horace Maynard..... 1880

Secretary of the Navy

Richard W. Thompson..... 1877

Nathan Goff, Jr..... 1881

Secretary of the Interior

Carl Schurz..... 1877

GARFIELD

Secretary of State

James G. Blaine..... 1881

Secretary of the Treasury

William Windom..... 1881

Secretary of War

Robert T. Lincoln..... 1881

Attorney General

Wayne MacVeagh..... 1881

Postmaster General

Thomas L. James..... 1881

Secretary of the Navy

William H. Hunt..... 1881

Secretary of the Interior

Samuel J. Kirkwood..... 1881

ARTHUR

Secretary of State

James G. Blaine..... Contd
F. T. Frelinghuysen.... 1881

Secretary of the Treasury

William Windom..... Contd
Charles J. Folger..... 1881
Waiter Q. Gresham..... 1884
Hugh McCulloch..... 1884

Secretary of War

Robert T. Lincoln..... Contd

Attorney General

Wayne MacVeagh..... Contd
Benjamin H. Brewster. 1881

Postmaster General

Thomas L. James..... Contd
Timothy O. Howe..... 1881
Walter Q. Gresham..... 1883
Frank Hatton..... 1884

Secretary of the Navy

William H. Hunt..... Contd
William E. Chandler.... 1882

Secretary of the Interior

Samuel J. Kirkwood.. Contd
Henry M. Teller..... 1882

CLEVELAND

Secretary of State

Thomas F. Bayard..... 1885

Secretary of the Treasury

Daniel Manning..... 1885
Charles S. Fairchild.... 1887

Secretary of War

William C. Endicott... 1885

Attorney General

Augustus H. Garland... 1885

Postmaster General

William F. Vilas..... 1885
Don M. Dickinson..... 1888

Secretary of the Navy

William C. Whitney.... 1885

Secretary of the Interior

Lucius Q. C. Lamar.... 1885
William F. Vilas..... 1888

Secretary of Agriculture

Norman J. Colman.... 1889

HARRISON

Secretary of State

James G. Blaine..... 1889
John W. Foster..... 1892

Secretary of the Treasury

William Windom..... 1889
Charles Foster..... 1891

Secretary of War

Redfield Proctor..... 1889
Stephen B. Elkins..... 1891

Attorney General

William H. H. Miller... 1889

Postmaster General

John Wanamaker..... 1889

Secretary of the Navy

Benjamin F. Tracy.... 1889

Secretary of the Interior

John W. Noble..... 1889

Secretary of Agriculture

Jeremiah M. Rusk.... 1889

CLEVELAND

Secretary of State

Walter Q. Gresham.... 1893
Richard Olney..... 1895

Secretary of the Treasury

John G. Carlisle..... 1893

Secretary of War

Daniel S. Lamont..... 1893

Attorney General

Richard Olney..... 1893
Judson Harmon..... 1895

Postmaster General

Wilson S. Bissell.... 1893
William L. Wilson..... 1895

Secretary of the Navy

Hilary A. Herbert..... 1893

Secretary of the Interior

Hoke Smith..... 1893
David R. Francis..... 1896

Secretary of Agriculture

Julius Sterling Morton. 1893

McKINLEY

Secretary of State

John Sherman..... 1897
William R. Day..... 1898
John Hay..... 1898

Secretary of the Treasury

Lyman J. Gage..... 1897

Secretary of War

Russell A. Alger..... 1897
Elihu Root..... 1899

Attorney General

Joseph McKenna..... 1897
John W. Griggs..... 1898
Philander C. Knox.... 1901

Postmaster General

James A. Gary..... 1897
Charles E. Smith..... 1898

Secretary of the Navy

John D. Long..... 1897

Secretary of the Interior

Cornelius N. Bliss.... 1897
Ethan A. Hitchcock.... 1898

Secretary of Agriculture

James Wilson..... 1897

T. ROOSEVELT

Secretary of State

John Hay..... Contd
Elihu Root..... 1905
Robert Bacon..... 1909

Secretary of the Treasury

Lyman J. Gage..... Contd
Leslie M. Shaw..... 1902
George B. Cortelyou... 1907

Secretary of War

Elihu Root..... Contd
William H. Taft..... 1904
Luke E. Wright..... 1908

Attorney General

Philander C. Knox.... Contd
William H. Moody..... 1904
Charles J. Bonaparte... 1906

Postmaster General

Charles E. Smith..... Contd
Henry C. Payne..... 1902
Robert J. Wynne..... 1904
George B. Cortelyou... 1905
George von L. Meyer... 1907

Secretary of the Navy

John D. Long..... Contd
William H. Moody..... 1902
Paul Morton..... 1904
Charles J. Bonaparte... 1905
Victor H. Metcalf..... 1906
Truman H. Newberry.. 1908

Secretary of the Interior

Ethan A. Hitchcock... Contd
James R. Garfield..... 1907

Secretary of Agriculture

James Wilson..... Contd

Secretary of Commerce
and Labor

George B. Cortelyou... 1903
Victor H. Metcalf..... 1904
Oscar S. Straus..... 1906

TAFT

Secretary of State

Philander C. Knox.... 1909

Secretary of the Treasury

Franklin MacVeagh... 1909

Secretary of War

Jacob M. Dickinson... 1909
Henry L. Stimson..... 1911

Attorney General

George W. Wickersham. 1909

Postmaster General

Frank H. Hitchcock... 1909

Secretary of the Navy

George von L. Meyer... 1909

Secretary of the Interior

Richard A. Ballinger... 1909
Walter L. Fisher..... 1911

Secretary of Agriculture

James Wilson..... Contd

Secretary of Commerce
and Labor

Charles Nagel.....

WILSON

Secretary of State

William J. Bryan....
Robert Lansing....
Bainbridge Colby....

Secretary of the Treasury

William G. McAdoo...
Carter Glass.....
David F. Houston....

Secretary of War

Lindley M. Garrison...
Newton D. Baker....

Attorney General

James C. McReynolds...
Thomas W. Gregory...
A. Mitchell Palmer...

Postmaster General

Albert S. Burleson...

Secretary of the Navy

Josephus Daniels....

Secretary of the Interior

Franklin K. Lane....
John B. Payne.....

Secretary of Agriculture

David F. Houston...
Edwin T. Meredith...

Secretary of Commerce

William C. Redfield...
Joshua W. Alexander...

Secretary of Labor

William B. Wilson...

HARDING

Secretary of State

Charles E. Hughes...

Secretary of the Treasury

Andrew W. Mellon...

Secretary of War

John W. Weeks.....

Attorney General

Harry M. Daugherty...
Postmaster General

Will H. Hays.....
Hubert Work.....
Harry S. New.....

Secretary of the Navy

Edwin Denby.....

Secretary of the Interior

Albert B. Fall.....
Hubert Work.....

Secretary of Agriculture

Henry C. Wallace...
Secretary of Commerce

Herbert Hoover....
Secretary of Labor

James J. Davis.....

BLIDGE

ry of State
ughes.... Contd
logg..... 1925
of the Treasury
Mellon.... Contd
ary of War
ks..... Contd
vis..... 1925
ey General
gherty... Contd
ne..... 1924
ent..... 1925
ter General
y..... Contd
of the Navy
bur..... 1924

of the Interior
..... Contd
..... 1928
of Agriculture
place..... Contd
pre..... 1924
ardine.... 1925

of Commerce
er..... Contd
hiting.... 1928
y of Labor
is..... Contd

OVER

ry of State
ogg..... Contd
ason..... 1929
of the Treasury
Mellon.... Contd
s..... 1932

ry of War
d..... 1929
ley..... 1929

Master General did not become a Cabinet member until 1829. Earlier Postmasters General were: Samuel (9), Timothy Pickens (1791), Joseph Habersham (1795), Gideon Granger (1801), Return J. Meigs, Jr. (1801), John McLean (1823).² On July 26, 1947, the Departments of War and of the Navy were incorporated into Department of Defense.³ Not confirmed by the Senate.

Attorney General
William D. Mitchell.... 1929
Postmaster General
Walter F. Brown..... 1929
Secretary of the Navy
Charles F. Adams..... 1929
Secretary of the Interior
Ray Lyman Wilbur.... 1929
Secretary of Agriculture
Arthur M. Hyde..... 1929
Secretary of Commerce
Robert P. Lamont..... 1929
Roy D. Chapin..... 1932
Secretary of Labor
James J. Davis..... Contd
William N. Doak..... 1930

F. ROOSEVELT

Secretary of State
Cordell Hull..... 1933
E. R. Stettinius, Jr.... 1944
Secretary of the Treasury
William H. Woodin.... 1933
Henry Morgenthau, Jr.. 1934
Secretary of War
George H. Dern..... 1933
Harry H. Woodring.... 1936
Henry L. Stimson..... 1940

Attorney General
Homer S. Cummings... 1933
Frank Murphy..... 1939
Robert H. Jackson.... 1940
Francis Biddle..... 1941

Postmaster General
James A. Farley..... 1933
Frank C. Walker..... 1940

Secretary of the Navy
Claude A. Swanson... 1933
Charles Edison..... 1940
Frank Knox..... 1940
James Forrestal..... 1944

Secretary of the Interior
Harold L. Ickes..... 1933
Secretary of Agriculture
Henry A. Wallace..... 1933
Claude R. Wickard..... 1940
Secretary of Commerce
Daniel C. Roper..... 1933
Harry L. Hopkins..... 1938
Jesse H. Jones..... 1940
Henry A. Wallace..... 1945
Secretary of Labor
Frances Perkins..... 1933

TRUMAN

Secretary of State
E. R. Stettinius, Jr.... Contd
James F. Byrnes..... 1945
George C. Marshall.... 1947
Dean Acheson..... 1949

Secretary of the Treasury
Henry Morgenthau, Jr. Contd
Fred M. Vinson..... 1945
John W. Snyder..... 1946

Secretary of Defense
James Forrestal..... 1947
Louis A. Johnson..... 1949
George C. Marshall.... 1950
Robert A. Lovett..... 1951

Attorney General
Francis Biddle..... Contd
Tom C. Clark..... 1945
J. Howard McGrath.... 1949
James P. McGranery... 1952

Postmaster General
Frank C. Walker..... Contd
Robert E. Hannegan... 1945
Jesse M. Donaldson.... 1947

Secretary of the Interior
Harold L. Ickes..... Contd
Julius C. Krug..... 1946
Oscar L. Chapman..... 1949

Secretary of Agriculture
Claude R. Wickard.... Contd
Clinton P. Anderson... 1945
Charles F. Brannan.... 1948

Secretary of Commerce
Henry A. Wallace..... Contd
W. Averell Harriman... 1946
Charles Sawyer..... 1948

Secretary of Labor
Frances Perkins..... Contd
Lewis B. Schwellenbach 1945
Maurice J. Tobin..... 1948

Secretary of War²
Henry L. Stimson..... Contd
Robert P. Patterson... 1945
Kenneth C. Royall.... 1947

Secretary of the Navy²
James Forrestal..... Contd

EISENHOWER

Secretary of State
John Foster Dulles.... 1953
Christian A. Herter.... 1959

Secretary of the Treasury
George M. Humphrey... 1953
Robert B. Anderson.... 1957

Secretary of Defense
Charles E. Wilson..... 1953
Neil H. McElroy..... 1957
Thomas S. Gates, Jr.... 1959

Attorney General
Herbert Brownell, Jr.. 1953
William P. Rogers..... 1958

Postmaster General
Arthur Summerfield... 1953

Secretary of the Interior
Douglas McKay..... 1953
Frederick A. Seaton... 1956

Secretary of Agriculture
Ezra Taft Benson..... 1953

Secretary of Commerce
Sinclair Weeks..... 1953
Lewis L. Strauss³.... 1958
Frederick H. Mueller... 1959

Secretary of Labor
Martin P. Durkin..... 1953
James P. Mitchell..... 1953

Secretary of Health,
Education and Welfare
Oveta Culp Hobby..... 1953
Marion B. Folsom.... 1955
Arthur S. Flemming.... 1958

The Confederate States of America, 1861-65

—Jefferson Davis; born, Christian (now Todd) Co., Ky., June 3, 1808; died, Dec. 6, 1889. Vice Alexander H. Stephens.

CABINET*

ry of State	Secretary of War	Secretary of Navy	Attorney General
s..... 1861	Leroy P. Walker..... 1861	Stephen R. Mallory... 1861	Judah P. Benjamin.... 1861
Hunter.... 1861	Judah P. Benjamin.... 1861		Thomas Bragg..... 1861
jamin.... 1862	George W. Randolph... 1862	Postmaster General	Thomas N. Watts..... 1862
of Treasury	James A. Seddon..... 1862	Henry T. Ellett..... 1861	George Davis..... 1864
emming... 1861	John C. Breckinridge... 1865	John H. Reagan..... 1861	
nholm... 1864			

those of appointment.

Members of the Supreme Court of the United States

Source: The Marshal, Supreme Court of the United States.

Name	Birth		Religious Affiliation (Source: Library of Congress)	Appointment		Oath Taken		Service Terminated				Death	
	Place	Date		From	President	Date	Age	Date	Cause	Years Served	Age	Date	
CHIEF JUSTICES													
John Jay	N. Y.	1745	Episcopal	N. Y.	Washington	1790	44	1795	resigned	5	49	1829	83
John Rutledge	S. C.	1739	Church of England	S. C.	Washington	1795	55	1795	rejected	0	56	1800	60
Oliver Ellsworth	Conn.	1745	Congregational	Conn.	Washington	1796	50	1800	resigned	4	55	1807	62
John Marshall	Va.	1755	Episcopal	Va.	J. Adams	1801	45	1835	death	34	79	1835	79
Roger B. Taney	Md.	1777	Roman Catholic	Md.	Jackson	1836	59	1864	death	28	87	1864	87
Salmon P. Chase	N. H.	1808	Episcopal	Ohio	Lincoln	1864	56	1873	death	8	65	1873	65
Morrison R. Waite	Conn.	1816	Episcopal	Ohio	Grant	1874	57	1888	death	14	71	1888	71
Melville W. Fuller	Maine	1833	Protestant	Ill.	Cleveland	1888	55	1910	death	21	77	1910	77
Edward D. White	La.	1845	Roman Catholic	La.	Taft	1910	65	1921	death	10	75	1921	75
William H. Taft	Ohio	1857	Unitarian	Conn.	Harding	1921	63	1930	retired	8	72	1930	72
Charles E. Hughes	N. Y.	1862	Baptist	N. Y.	Hoover	1930	67	1941	retired	11	79	1948	86
Harlan F. Stone	N. H.	1872	Episcopal	N. Y.	F. Roosevelt	1941	68	1946	death	4	73	1946	73
Frederick M. Vinson	Ky.	1890	Methodist	Ky.	Truman	1946	56	1953	death	7	63	1953	63
Earl Warren	Calif.	1891	Baptist	Calif.	Eisenhower	1953	62	....	.....	....	....	....	....
ASSOCIATE JUSTICES													
James Wilson	Scotland	1742	Episcopal	Pa.	Washington	1789	47	1798	death	8	55	1798	55
John Rutledge	S. C.	1739	Church of England	S. C.	Washington	1790	50	1791	resigned	1	51	1800	60
William Cushing	Mass.	1732	Unitarian	Mass.	Washington	1790	57	1810	death	20	78	1810	78
John Blair	Va.	1732	Presbyterian	Va.	Washington	1790	58	1796	resigned	5	64	1800	68
James Iredell	England	1751	Episcopal	N. C.	Washington	1790	38	1799	death	9	48	1799	48
Thomas Johnson	Md.	1732	Episcopal	Md.	Washington	1792	59	1793	resigned	0	60	1819	86
William Paterson	Ireland	1745	Presbyterian	N. J.	Washington	1793	47	1806	death	13	60	1806	60
Samuel Chase	Md.	1741	Episcopal	Md.	Washington	1796	54	1811	death	15	70	1811	70
Bushrod Washington	Va.	1762	Church of England	Va.	J. Adams	1799	36	1829	death	30	67	1829	67
Alfred Moore	N. C.	1755	Protestant	N. C.	J. Adams	1800	45	1804	resigned	3	48	1810	55
William Johnson	S. C.	1771	Presbyterian	S. C.	Jefferson	1804	32	1834	death	30	62	1834	62
Brockholst Livingston	N. Y.	1757	Presbyterian	N. Y.	Jefferson	1807	49	1823	death	16	65	1823	65
Thomas Todd	Va.	1765	Presbyterian	Ky.	Jefferson	1807	42	1826	death	18	61	1826	61
Gabriel Duval	Md.	1752	French Protestant	Md.	Madison	1811	58	1835	resigned	23	82	1844	91
Joseph Story	Mass.	1779	Calvinist	Mass.	Madison	1812	32	1845	death	33	65	1845	65
Smith Thompson	N. Y.	1768	Presbyterian	N. Y.	Monroe	1823	55	1843	death	20	75	1843	75
Robert Trimble	Va.	1777	Protestant	Ky.	J. Q. Adams	1826	49	1828	death	2	51	1828	51
John McLean	N. J.	1785	Protestant	Ohio	Jackson	1830	44	1861	death	31	76	1861	76

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Members of the Supreme Court of the United States (Contd.)

Name	Birth		Religious Affiliation (Source: Library of Congress)	Appointment		Oath Taken		Service Terminated			Death	
	Place	Date		From	President	Date	Age	Date	Cause	Years Served	Date	Age
Benjamin N. Cardozo	N. Y.	1870	Hebrew	N. Y.	Hoover	1932	61	1938	death	6	1938	68
Hugo L. Black	Ala.	1886	Baptist	Ala.	F. Roosevelt	1937	51	1938	retired	19	1938	68
Stanley F. Reed	Ky.	1884	Protestant	Ky.	F. Roosevelt	1938	53	1957	retired	19	1957	73
Felix Frankfurter	Austria	1882	Hebrew	Mass.	F. Roosevelt	1939	56	1939	death	...	1939	59
William O. Douglas	Minn.	1890	Presbyterian	Conn.	F. Roosevelt	1939	40	1949	death	9	1949	59
Frank Murphy	Mich.	1879	Roman Catholic	Mich.	F. Roosevelt	1940	62	1942	resigned	1	1942	63
James F. Byrnes	S. C.	1879	Episcopal	S. C.	F. Roosevelt	1941	62	1954	death	13	1954	62
Robert H. Jackson	N. Y.	1892	Episcopal	N. Y.	F. Roosevelt	1941	49	1949	death	6	1949	55
Wiley B. Rutledge	Ky.	1884	Unitarian	Iowa	F. Roosevelt	1943	48	1958	retired	13	1958	64
Harold H. Burton	Mass.	1888	Unitarian	Ohio	Truman	1945	57	1956	retired	7	1956	67
Tom C. Clark	Tex.	1899	Presbyterian	Ind.	Truman	1949	49	1955	death	...	1955	56
Sherman Minton	Ind.	1890	Protestant	Ind.	Truman	1949	58	1959	death	...	1959	60
John M. Harlan	Ill.	1899	Presbyterian	N. Y.	Eisenhower	1955	55	1956	death	...	1956	57
William J. Brennan, Jr.	N. J.	1906	Roman Catholic	N. J.	Eisenhower	1956	50	1957	death	...	1957	51
Charles E. Whitaker	Kans.	1901	Methodist	Mo.	Eisenhower	1957	56	1959	death	...	1959	58
Potter Stewart	Mich.	1915	Episcopal	Ohio	Eisenhower	1959	44	1959	death	...	1959	44

¹ Professing Christian. ² Unitarian, then Episcopal.
³ Unitarian or Congregational.

Impeachments

U. S. Constitution, Article I, Section 3.

The Senate shall have the sole Power to try all Impeachments When sitting for that Purpose, they shall be on Oath or Affirmation When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and enjoy any Office of honor, Trust, or Profit under the United States: but the Party convicted may nevertheless be impeached by the House of Representatives: Impeachment does not prevent a second trial by the Senate.

Federal Impeachments

Source: Congressional Directory.

The Senate has sat as a court of impeachment in the following cases:

WILLIAM BLOUNT, Senator from Tennessee; charges dismissed for want of jurisdiction, January 14, 1799.

JOHN PICKERING, Judge of the U. S. District Court for New Hampshire; removed from office March 12, 1804.

SAMUEL CHASE, Associate Justice of the Supreme Court; acquitted March 1, 1805.

JAMES H. PECK, Judge of the U. S. District Court for Missouri; acquitted Jan. 31, 1831. WEST H. HUMPHREYS, Judge of the United States District Court for the middle, eastern, and western districts of Tennessee; acquitted May 24, 1833.

WILLIAM W. BELKNAP, Secretary of War; acquitted Aug. 1, 1876.

CHARLES SWAYNE, Judge of the United States District Court for the northern district of Florida; acquitted Feb. 27, 1905.

ROBERT W. ARCHBOLD, Associate Judge, United States Commerce Court; removed from office January 13, 1913.

GEORGE W. ENGLISH, Judge of the U. S. District Court for the eastern district of Illinois; resigned office November 4, 1926; impeachment proceedings dismissed. HAROLD LOUDERBACK, Judge of the U. S. District Court for the northern district of California; acquitted May 24, 1933.

Executive Departments and Agencies

Source: U. S. Government Organization Manual.

Otherwise indicated, addresses shown are in Washington, D.C. Many officials listed are subject to change with the new administration.)

Executive Office of the President

WHITE HOUSE OFFICE

Pennsylvania Ave., NW.

Assistant to the President: Wilton

Deputy Assistant to the President: D. Morgan.

Secretary to the President: Thomas E.

Secretary to the President: James

Chief Counsel to the President: David

Special Assistant to the President for

Security Affairs: Gordon Gray.

Activities: Serves President in perform-

activities incident to his office.

OFFICE OF THE BUDGET

Executive Office Bldg.

Established: June 10, 1921.

Director: Maurice H. Stans.

Activities: Assists President in preparing

and formulating fiscal program;

manages administration of budget; con-

siders advice on proposed legislation;

improvements in statistical services;

President informed of progress of ac-

tion by government agencies so that

national appropriations are spent

economically.

OFFICE OF ECONOMIC ADVISERS

(A)

Executive Office Bldg.

Members: 3. Established: Feb. 20, 1946.

Chairman: Raymond J. Saulnier.

Members: Karl Brandt, Henry C.

Activities: Assists President in prepara-

economic reports to Congress;

economic trends; appraises govern-

activities on nation's economy;

ends economic policies.

NATIONAL SECURITY COUNCIL (NSC)

Executive Office Bldg.

Members: 5. Established: July 26, 1947.

Chairman: Dwight D. Eisenhower, Presi-

dent of the U. S.

Members: Richard M. Nixon, Vice

President; Christian A. Herter, Secretary

; Thomas S. Gates, Jr., Secretary

of Defense; Leo A. Hoegh, Director of

Civil and Defense Mobilization.

Activities: Assesses and appraises objec-

tive commitments and risks of U. S. in

relation to our actual and potential mili-

tary interests of national security.

JOINT CHIEFS OF STAFF COORDINATING BOARD

Executive Office Bldg.

Members: 7 or more. Officials: 3.

Established: Sept. 2, 1953.

Activities: Assists in coordinating and implementing certain functions of certain agencies in carrying out the national security policy and, when necessary, initiates new proposals for action within the framework of national security policies.

CENTRAL INTELLIGENCE AGENCY (CIA)

2430 E Street N.W.

Established: 1947.

Director: Allen W. Dulles.

Deputy Director: Gen. C. P. Cabell, USAF.

Activities: Coordinates intelligence activities of certain government departments and agencies by making recommendations to the National Security Council; correlates and evaluates intelligence and disseminates the results; performs certain additional services for existing intelligence agencies when the National Security Council determines that these can be more efficiently accomplished centrally; and performs such other functions as the National Security Council may direct.

NATIONAL AERONAUTICS AND SPACE COUNCIL

1520 H St., NW.

Members: 9. Established: 1958.

Chairman: Dwight D. Eisenhower, President of the U. S.

Other members: Christian A. Herter, Secretary of State; Thomas S. Gates, Jr., Secretary of Defense; T. Keith Glennan, Administrator of National Aeronautics and Space Administration; John A. McCone, Chairman of Atomic Energy Commission; Alan T. Waterman; Detlev W. Bronk; vacancy; John T. Rettaliata.

Activities: Advises President regarding policies, plans, programs, and accomplishments of U. S. agencies engaged in aeronautical and space activities.

OFFICE OF CIVIL AND DEFENSE MOBILIZATION (OCDM)

Executive Office Bldg.

Established: July 1, 1958, from merger of Office of Defense Mobilization and Federal Civil Defense Administration.

Director: Leo A. Hoegh.

Activities: Advises President on coordination of military, industrial and civilian mobilization.

PRESIDENT'S ADVISORY COMMITTEE ON GOVERNMENT ORGANIZATION

Executive Office Bldg.

Members: 4. Established: January 24, 1958.

Chairman: Arthur S. Flemming.

Activities: Advises the President, the Assistant to the President and the Director of the Bureau of the Budget on changes

in organization and activities to promote economy and efficiency in the executive branch of the Government.

Executive Departments

DEPARTMENT OF STATE

21st St. & Virginia Ave., NW.

Established: 1781 as Department of Foreign Affairs; reconstituted, 1789, following adoption of Constitution; name changed to Department of State Sept. 15, 1789.

Secretary: Christian A. Herter.

Under Secretary: Douglas Dillon.

Activities: Determines government policy in relation to international problems; formulates measures for promoting friendship with other countries; develops policies and programs for U. S. participation in U. N. and other international organizations; conducts correspondence with our representatives abroad and with accredited foreign representatives here.

DEPARTMENT OF THE TREASURY

15th St. & Pennsylvania Ave., NW.

Established: Sept. 2, 1789.

Secretary: Robert B. Anderson.

Under Secretary: Fred C. Scribner, Jr.

Activities: Manages national finances; grants warrants for money drawn from Treasury pursuant to legal appropriations; handles collection of revenue; keeps and renders public accounts; prepares plans for improvement of revenue and for support of public credit; reports annually to Congress on condition of public finances; controls coinage and printing of money; administers Coast Guard, Bureau of Narcotics, and Secret Service.

DEPARTMENT OF DEFENSE

The Pentagon

Established: July 26, 1947, as National Military Establishment; name changed to Department of Defense on Aug. 10, 1949. Subordinate to Secretary of Defense are Secretaries of Army, Navy, Air Force.

Secretary: Thomas S. Gates, Jr.

Deputy Secretary: James H. Douglas.

Secretary of Army: Wilber M. Brucker.

Secretary of Navy: William B. Franke.

Commandant, Marine Corps: Gen. David M. Shoup (after Jan. 1, 1960).

Secretary of Air Force: Dudley C. Sharp.

*Joint Chiefs of Staff:** Gen. Lyman L. Lemnitzer, chairman; Gen. George H. Decker, Army; Adm. Arleigh A. Burke, Navy; Gen. Thomas D. White, Air Force; Gen. David M. Shoup, Marine Corps (on Marine Corps matters only).

Activities: Provides for security of U. S. by establishing integrated policies and procedures; co-ordinates and directs the activities of 3 separately administered military departments (Army, Navy, Air Force).

* Consisting of chairman and chiefs of each service.

DEPARTMENT OF JUSTICE

Constitution Ave. & 10th St., NW.

Established: Office of Attorney General was created Sept. 24, 1789. Although was one of original Cabinet members he was not executive department head until June 22, 1870, when Department of Justice was established.

Attorney General: William P. Rogers.

Deputy Atty. Gen.: Lawrence E. Walsh.

Director of FBI: J. Edgar Hoover.

Activities: Provides means for enforcement of Federal laws; investigates and detects violations; represents U. S. in legal matters generally and gives advice and opinion when requested by President or heads of executive departments; directs FBI, Bureau of Prisons, Immigration and Naturalization Service.

POST OFFICE DEPARTMENT

12th St. & Pennsylvania Ave., NW.

Established: Office of Postmaster General and temporary post office system created Sept. 22, 1789. Act of Feb. 20, 1792, provided detailed provisions for Post Office Department. Postmaster General became Cabinet member in 1829. Department received executive status June 8, 1872.

Postmaster General: Arthur E. Sumner.

Deputy Postmaster General: John McKibbin.

Activities: Maintains Postal Service of U. S. and executes all laws relative to negotiates, subject to approval of President, postal treaties with foreign governments.

DEPARTMENT OF THE INTERIOR

C St. between 18th & 19th Sts., NW.

Established: Mar. 3, 1849.

Secretary: Fred A. Seaton.

Under Secretary: Elmer F. Bennett.

Activities: Develops and conserves natural resources of U. S. and territories; supervises public business relating to land offices as Bureau of Land Management, Bureau of Reclamation, Geological Survey, Bureau of Indian Affairs, National Park Service, Bureau of Mines, Fish and Wildlife Service, Office of Territories, etc.

DEPARTMENT OF AGRICULTURE

14th St. & Independence Ave., SW.

Established: May 15, 1862. Administered by Commissioner of Agriculture until 1889 when it was made executive department and office of Secretary was created.

Secretary: Ezra Taft Benson.

Under Secretary: True D. Morse.

Activities: Conducts comprehensive research and educational program relating to agriculture; provides crop reports, commodity standards, meat inspection, other marketing services; administers national forests; aids in flood control; administers price-support and production-adjustment programs; makes loans to farmers.

DEPARTMENT OF COMMERCE

St. between Constitution Ave. & E

Established: Department of Commerce was created Feb. 14, 1903. On Jan. 1, 1913, all labor activities were transferred to Department of Commerce and it was renamed Department of Commerce.

Secretary: Philip A. Ray.

Activities: Promotes and develops foreign and domestic commerce of U. S.; maintains Bureau of the Census, Office of Business Administration, Coast and Geodetic Survey, Patent Office, Bureau of Public Roads, National Bureau of Standards, Weather Bureau, etc.

DEPARTMENT OF LABOR

St. & Constitution Ave., NW.

Established: Bureau of Labor was created in 1884 under Department of the Interior. It later became independent department without executive rank. Returned to its original status in Department of Commerce in 1903, but on Mar. 4, 1913, became independent executive department under its present name.

Secretary: James P. Mitchell.

Secretary: James T. O'Connell.

Activities: Promotes welfare of wage earners of U. S., improving working conditions and advancing opportunities for employment; directs collection and analysis of statistics concerning labor conditions; promulgates and enforces certain minimum-hour, minimum-wage, child-labor and health standards.

DEPARTMENT OF HEALTH, EDUCATION & WELFARE

Independence Ave., SW.

Established: Apr. 11, 1953, replacing Federal Health Agency created in 1939.

Secretary: Arthur S. Flemming.

Secretary: Bertha S. Adkins.

Activities: Supervises and co-ordinates various organizations within the department. Organizations are: Food and Drug Administration, Office of Education, Office of National Rehabilitation, Public Health Service, St. Elizabeths Hospital, Social Security Administration; also following federally supported corporations: American Guild for the Blind, Gallaudet College and Howard University.

Independent Agencies

Addresses of independent agencies not described below follow on page 581.)

Executive Department

ATOMIC ENERGY COMMISSION (AEC)

Office: Germantown, Md.; D.C. office: 17 H St., NW.

Members: 5. *Established:* Aug. 1, 1946.

Chairman: John A. McCone.

Other members: Robert E. Wilson, John S. Graham, Loren K. Olson, (1 vacancy).

Activities: Promotes federal and private research and development; controls dissemination of information and production, ownership and use of fissionable materials.

CIVIL AERONAUTICS BOARD (CAB)

Universal Bldg.

Members: 5. *Established:* June 30, 1940.

Chairman: Whitney Gilliland.

Activities: Regulates economic aspects of U. S. air carrier operation; assists in development of international air transportation; promotes safety in civil aviation.

FARM CREDIT ADMINISTRATION (FCA)

South Bldg., Dept. of Agriculture.

Established: July 17, 1916.

Chairman: George P. Daley.

Activities: Supervises and coordinates cooperative credit system for agriculture; provides long- and short-term credit to farmers and their cooperative marketing and business service organizations.

FEDERAL COMMUNICATIONS COMMISSION (FCC)

Post Office Dept. Bldg.

Members: 7. *Established:* 1934.

Chairman: Frederick W. Ford.

Activities: Regulates interstate and foreign communications by wire and radio, including amateur radio and TV; regulates operator's licenses; classifies radio stations and prescribes their services; enforces use of radio for safety purposes on U. S. ships.

FEDERAL MEDIATION AND CONCILIATION SERVICE (FMCS)

Department of Labor Bldg.

Established: 1947.

Director: Joseph F. Finnegan.

Activities: Assists in labor-management disputes in industries affecting interstate commerce to reach settlements by mediation or conciliation; promotes better relations between labor and management.

FEDERAL POWER COMMISSION (FPC)

General Accounting Office Bldg., 441 G St., NW.

Members: 5. *Established:* June 23, 1930.

Chairman: Jerome K. Kuykendall.

Activities: Licenses hydroelectric projects on U. S. Government lands or navigable waters; has jurisdiction over interstate commerce involving sale of electric energy and natural gas and companies engaged therein; handles transmission of electric energy and natural gas between U. S. and foreign countries.

FEDERAL RESERVE SYSTEM (FRS), BOARD OF GOVERNORS OF

20th St. & Constitution Ave., NW.

Members: 7. *Established:* Dec. 23, 1913.

Chairman: William McC. Martin, Jr.

Activities: Supervises Federal Reserve banks; influences credit conditions; regulates open-market operations; issues Federal Reserve notes.

FEDERAL TRADE COMMISSION (FTC)

6th St. & Pennsylvania Ave., NW.

Members: 5. **Established:** Sept. 26, 1914.

Chairman: Earl W. Kintner.

Activities: Prevents unfair competition, deceptive practices, false advertising, price discrimination, monopolies.

HOUSING AND HOME FINANCE AGENCY (HHFA)

1626 K St., NW.

Established: July 27, 1947.

Administrator: Norman P. Mason.

Activities: Provides single agency responsible for principal housing programs and functions of Federal government; supervises and co-ordinates activities of Federal National Mortgage Association (FNMA), Federal Housing Administration (FHA), Public Housing Administration (PHA), Voluntary Home Mortgage Credit Program, Urban Renewal Administration, and Community Facilities Administration.

INTERSTATE COMMERCE COMMISSION (ICC)

12th St. & Constitution Ave., NW.

Members: 11. **Established:** Feb. 4, 1887.

Chairman: John H. Winchell.

Activities: Regulates railroads, motor carriers, water carriers and freight forwarders as to rates, through-routes, services and bills of lading; authorizes mergers or consolidations; authorizes issue of securities by carriers.

NATIONAL LABOR RELATIONS BOARD (NLRB)

3rd & C Sts., SW.

Members: 5. **Established:** July 5, 1935.

Chairman: Boyd Leedom.

Activities: Prevents unfair labor practices by employers or labor organizations; conducts secret ballots among employees to determine their choice of bargaining representatives.

SECURITIES AND EXCHANGE COMMISSION (SEC)

425 2nd St., NW.

Members: 5. **Established:** June 6, 1934.

Chairman: Edward N. Gadsby.

Activities: Registers and issues regulations for securities and exchanges; registers securities offered for public sale; penalizes violators of regulations subject to appeal to U. S. Court of Appeals.

SELECTIVE SERVICE SYSTEM (SSS)

451 Indiana Ave., NW.

Established: 1948.

Director: Lt. Gen. Lewis B. Hershey.

Activities: Handles registration, examination, classification and selection induction into armed forces or other position of men required to register under Universal Military Training and Service Act.

SMALL BUSINESS ADMINISTRATION (SBA)

811 Vermont Ave., NW.

Established: July 30, 1953.

Administrator: Philip McCallum.

Activities: Aids and assists the interests of small business firms to insure a share of total government contracts; makes loans to small firms and victims of flood and disaster.

TENNESSEE VALLEY AUTHORITY (TVA)

New Sprankle Bldg., Knoxville, Tenn. (Wash. office: Woodward Bldg., 15th Sts., NW.)

Members: 3. **Established:** May 18, 1933.

Chairman: Herbert D. Vogel.

Other members: Arnold R. Jones, Brainerd Hays.

Activities: Provides navigable channels and flood control of Tennessee River and some of its larger tributaries; disposes surplus electric power; improves, increases and cheapens fertilizer production.

U. S. CIVIL SERVICE COMMISSION (U.S.C.S.)

8th & F Sts., NW.

Members: 3. **Established:** Jan. 16, 1943.

Chairman: Roger W. Jones.

Activities: Provides examinations to determine fitness of applicants for positions in competitive service; provides personnel response to requests from appointing agencies; investigates applicants for national security purposes; classifies positions; maintains service records.

U. S. INFORMATION AGENCY (USIA)

1776 Pennsylvania Ave., NW.

Established: Aug. 1, 1953.

Director: George V. Allen.

Activities: Directs information to foreign peoples, such as explanation of policy of U. S. Government and delineation of U. S. life and culture.

U. S. TARIFF COMMISSION

E St. between 7th & 8th Sts., NW.

Members: 6. **Established:** Sept. 8, 1916.

Chairman: Joseph E. Talbot.

Activities: Investigates customs laws, fair competition and foreign and domestic manufacturing costs; advises the President on duty rates.

VETERANS' ADMINISTRATION (VA)

Vermont Ave. between H & I Sts., NW.

Established: July 21, 1930.

Administrator: Sumner G. Whittier.

Activities: Administers laws authorizing benefits for veterans and dependent beneficiaries. Included are hospitals, pensions, insurance, loans, education, etc.

Other Independent Agencies—

Executive Department
in Battle Monuments Commission—
 2018—Munitions Bldg.
one Government—312 Pennsylvania
 Washington 4, D.C.
Division of Fine Arts—Dept. of the
or Bldg., Eighteenth and C Sts.,
ment Loan Fund—1025 Fifteenth
 W.
of Columbia—District Bldg., Penn-
ia Ave. and Fourteenth St., NW.
Redevelopment Land Agency—919
 enth St., NW.
Import Bank of Washington—811
 ont Ave., NW.
Aviation Agency (FAA)—1711 New
 Ave., NW.
Coal Mine Safety Board of Review
 Vermont Ave., NW.
Deposit Insurance Corporation—
 al Press Bldg.
Home Loan Bank Board—101 In-
 Ave., NW.
Mediation and Conciliation Serv-
Dept. of Labor Bldg.
Claims Settlement Commission of
S.—Tariff Commission Bldg.
Services Administration (GSA)—
al Services Bldg., Eighteenth and
 NW.
Claims Commission—Room 3140,
al Accounting Office Bldg., 441 G
 W.
Aeronautics and Space Adminis-
h (NASA)—1520 H St., NW.
Capital Housing Authority—1729
 ork Avenue, NW.
Capital Planning Commission—
terior Bldg., Eighteenth and C
 Sts., NW.
Mediation Board—1230 Sixteenth
 W.
Science Foundation (NSF)—1951
 tution Ave., NW.

Panama Canal Company—312 Pennsylvania
 Bldg., Washington 4, D.C.
Railroad Retirement Board (RRB)—844
 Rush St., Chicago 11, Ill.
Renegotiation Board—Temporary Bldg. S,
 Seventh & Jefferson Drive, SW.
St. Lawrence Seaway Development Corp.—
 Seaway Circle, Massena, N.Y.
Smithsonian Institution—Smithsonian
 Bldg., The Mall, near Tenth St. and In-
 dependence Ave., SW.
Subversive Activities Control Board—La-
fayette Bldg., 811 Vermont Ave., NW.
Tax Court of the U.S.—Internal Revenue
 Bldg., Twelfth St. and Constitution Ave.,
 NW.
Virgin Islands Corporation—General Office,
 St. Croix, V.I.

Legislative Department

GENERAL ACCOUNTING OFFICE (GAO)

441 G St., NW.
Established: June 10, 1921.
Comptroller General of the U. S.: Joseph
 Campbell.
Activities: Performs independent audits
 of government financial transactions to
 provide basis for settlement of accounts
 and to evaluate management of financial
 affairs by agencies; exercises power of dis-
 allowance based on Comptroller General's
 settlement of accounts and claims; issues
 reports to Congress on its findings.

LIBRARY OF CONGRESS

First St., SE, between East Capitol St.
 and Independence Ave.
Established: Apr. 24, 1800.
Librarian of Congress: L. Quincy Mum-
 ford.
Activities: Intended primarily for service
 of Congress, it has come to include entire
 governmental establishment and the public.
 (For further description, consult index.)

Assassinations and Attempts in U. S. Since 1865

K, Anton J. (Mayor of Chicago):
 Feb. 15, 1933, in Miami by Giuseppe
 who attempted to assassinate
 D. Roosevelt; Cermak died Mar. 6.
LD, James A. (President of U. S.):
 July 2, 1881, in Washington, D. C.,
 tes J. Guiteau; died Sept. 19.
N, Abraham (President of U. S.):
 Apr. 14, 1865, in Washington, D. C.,
 Wilkes Booth; died Apr. 15.
Huey P. (U. S. Senator from Lou-)
: Shot Sept. 8, 1935, in Baton
 y Dr. Carl A. Weiss; died Sept. 10.
EY, William (President of U. S.):
 Sept. 6, 1901, in Buffalo by Leon
 ; died Sept. 14.

ROOSEVELT, Franklin D. (President-elect
of U. S.): Escaped assassination unhurt
 Feb. 15, 1933, in Miami. *See* Cermak.
ROOSEVELT, Theodore (ex-President of
U. S.): Escaped assassination (though
 shot) Oct. 14, 1912, in Milwaukee while
 campaigning for President.
SEWARD, William H. (Secretary of State):
 Escaped assassination (though injured)
 Apr. 14, 1865, in Washington, D. C., by
 Lewis Powell (or Paine), accomplice of
 John Wilkes Booth.
TRUMAN, Harry S. (President of U. S.):
 Escaped assassination unhurt Nov. 1,
 1950, in Washington, D. C., as 2 Puerto
 Rican nationalists attempted to shoot their
 way into Blair House.

Diplomatic Personnel To and From the U. S.

Source: U.S. Department of State.

Country	U. S. Representative to*	Rank	Representative from†	Rank
Afghanistan	Henry A. Byroade	Amb.	Mohammed Hashim Malwandwal	Amb.
Argentina	Willard L. Beaulac	Amb.	Dr. Emilio Donato del Carril	Amb.
Australia	William J. Sebald	Amb.	Howard Beale	Amb.
Austria	H. Freeman Matthews	Amb.	Dr. Wilfried Platzter	Amb.
Belgium	William A. M. Burden	Amb.	Louis Scheyven	Amb.
Bolivia	Carl W. Strom	Amb.	Victor Andrade	Amb.
Brazil	John M. Cabot	Amb.	Walthier Moreira Salles	Amb.
Bulgaria	Edward Page, Jr.	Min.	Dr. Peter G. Voutov	Min.
Burma	William P. Snow	Amb.	U On Sein	Amb.
Cambodia	William C. Trimble	Amb.	Nong Kimny	Amb.
Canada	Richard B. Wigglesworth	Amb.	A. D. P. Heeney	Amb.
Ceylon	Bernard A. Gufler	Amb.	R. S. S. Gunewardene	Amb.
Chile	Walter Howe	Amb.	Walter Müller	Amb.
China	Everett F. Drumright	Amb.	Dr. George K. C. Yeh	Amb.
Colombia	Dempster McIntosh	Amb.	Dr. Carlos Sanz de Santa- maria	Amb.
Costa Rica	Whiting Willauer	Amb.	Manuel G. Escalante	Amb.
Cuba	Philip W. Bonsal	Amb.	Dr. Enrique Patterson	Amb.
Czechoslovakia	John M. Allison	Amb.	Dr. Miloslav Ružek	Amb.
Denmark	Val Peterson	Amb.	Count Kield Gustav Knuth-Winterfeldt	Amb.
Dominican Republic	Joseph S. Farland	Amb.	Dr. Luis F. Thomen	Amb.
Ecuador	Christian M. Ravndal	Amb.	Dr. José R. Chiriboga V.	Amb.
El Salvador	Thorsten V. Kalijarvi	Amb.	Dr. Héctor David Castro	Amb.
Estonia	Legation closed	....	Johannes Kaiv²	Amb.
Ethiopia	Don C. Bliss	Amb.	Mikael Imru	Amb.
Finland	Edson O. Sessions	Amb.	Richard R. Seppälä	Amb.
France	Amory Houghton	Amb.	Hervé Alphand	Amb.
Germany	Walter C. Dowling	Amb.	Wilhelm G. Grewe	Amb.
Ghana	Willson C. Flake	Amb.	W. M. Q. Halm	Amb.
Great Britain	John Hay Whitney	Amb.	Sir Harold Caccia	Amb.
Greece	Ellis O. Briggs	Amb.	Alexis S. Liatis	Amb.
Guatemala	John J. Muccio	Amb.	Catlus Alejos	Amb.
Guinea	John Howard Morrow	Amb.	Telli Boubacar Diallo	Amb.
Haiti	Gerald A. Drew	Amb.	Ernest Bonhomme	Amb.
Honduras	Robert Newbegin	Amb.	Dr. Céleó Dávila	Amb.
Hungary	(vacant)	Min.	Tibor Zádor	Amb.
Iceland	Tyler Thompson	Amb.	Thor Thors	Amb.
India	Ellsworth Bunker⁴	Amb.	Mahomedali Currim Chagla	Amb.
Indonesia	Howard P. Jones	Amb.	Moekarto Notowidigdo	Amb.
Iran	Edward T. Walles	Amb.	Ardeshtir Zahedi	Amb.
Iraq	John D. Jernegan	Amb.	Ali Haider Sulaiman	Amb.
Ireland	Scott McLeod	Amb.	John Joseph Hearne	Amb.
Israel	Ogden R. Reid	Amb.	Avraham Harman	Amb.
Italy	James David Zellerbach	Amb.	Manlio Brosio	Amb.
Japan	Douglas MacArthur II	Amb.	Koichiro Asakai	Amb.
Jordan	Sheldon T. Mills	Amb.	Yusuf Haikal	Amb.
Korea	Walter P. McCaughy	Amb.	Dr. Kwang Lim Koh	Amb.
Laos	Horace H. Smith	Amb.	Tianethone Chantharasy	Amb.
Latvia	Legation closed	....	Dr. Arnolds Spekke	Amb.
Lebanon	Robert M. McClintock	Amb.	Nadim Dimechkié	Amb.
Liberia	Elbert G. Mathews	Amb.	George A. Padmore	Amb.
Libya	J. Wesley Jones	Amb.	Dr. Mohieddine Fekini	Amb.
Lithuania	Legation closed	....	Joseph Kajeckas	Amb.
Luxemburg	Vinton Chapin	Amb.	Georges Heisbourg	Amb.
Malaya	Homer M. Byington, Jr.	Amb.	Dato' Nik Ahmed Kamil	Amb.
Mexico	Robert C. Hill	Amb.	Antonio Carrillo Flores	Amb.
Morocco	Charles W. Yost	Amb.	Dr. El-Mehdi Ben Aboud	Amb.
Nepal	Henry E. Stebbins	Amb.	Rishikesh Shaha	Amb.
Netherlands	Philip Young	Amb.	Dr. J. H. van Roijen	Amb.
New Zealand	Francis H. Russell	Amb.	G. D. L. White.	Amb.
Nicaragua	Thomas E. Whelan	Amb.	Dr. Guillermo Sevilla- Sacasa	Amb.

	<i>U. S. Representative to</i>	<i>Rank</i>	<i>Representative from</i>	<i>Rank</i>
.....	Frances E. Willis	Amb.	Paul Koht	Amb.
.....	William M. Rountree	Amb.	Aziz Ahmed	Amb.
.....	Julian F. Harrington	Amb.	Dr. Erasmo de la Guardia	Amb.
.....	Harry F. Stimpson, Jr.	Amb.	Dr. Juan Plate	Amb.
.....	Selden Chapin	Amb.	Fernando Berckemeyer	Amb.
ies	John D. Hickerson	Amb.	Gen. Carlos P. Romulo	Amb.
.....	Jacob D. Beam	Amb.	Romuald Spasowski	Amb.
.....	C. Burke Elbrick	Amb.	Luis Esteves Fernandes	Amb.
.....	Clifton R. Wharton	Min.	George Macovescu	Min.
abia	Donald R. Heath	Amb.	Sheikh Adbullah Al-Khayyal	Amb.
.....	John Lodge	Amb.	Mariano de Yturralde	Amb.
.....	James S. Moose, Jr.	Amb.	Dr. Osman El Hadari	Amb.
.....	James C. H. Bonbright	Amb.	Gunnar Jarring	Amb.
nd	Henry J. Taylor	Amb.	Ernesto Thalmann	Cd'A ⁶
.....	U. Alexis Johnson	Amb.	Visutr Arthayukti	Amb.
.....	Walter N. Walmsley	Amb.	Mongi Slim	Amb.
.....	Fletcher Warren	Amb.	Melih Esenbel	Amb.
p. Africa ..	Philip K. Crowe	Amb.	A. B. F. Burger	Cd'A ⁶
.....	Llewellyn E. Thompson	Amb.	Mikhail A. Menshikov	Amb.
rab	Frederick G. Reinhardt ⁵	Amb.	Dr. Mostafa Kamel	Amb.
ic	Robert F. Woodward	Amb.	Carlos A. Clulow	Amb.
.....	Edward J. Sparks	Amb.	Dr. Marcos Falcón-Briceño	Amb.
.....	Elbridge Durbrow	Amb.	Tran Van Chuong	Amb.
.....	Frederick G. Reinhardt ⁵	Min.	Assayed Ahmad Ali Zabarrah	Cd'A
a	Karl L. Rankin	Amb.	Marko Nikezić	Amb.

April 1960. † As of August, 1960. (Taiwan). ² Legation in New York. ³ Acting. ⁴ Accredited to India and Nepal; resident in New Delhi. ⁵ Accredited as Ambassador to United Arab Republic and Minister to Yemen; resident in Cairo.

(Amb.—Ambassador; Min.—Minister; CG—Consul General; Cd'A—Chargé d'Affaires)

The Liberty Bell

erty Bell was cast in England in the Pennsylvania Statehouse (now Independence Hall). Damaged in transit, it was recast in Philadelphia in 1753. It is inscribed with the words, "Proclaim Liberty throughout all the land unto all the inhabitants thereof" (Lev. 25:10). The bell was rung on July 8, 1776, for the first pub-

lic reading of the Declaration of Independence. Hidden in Allentown during the British occupation of Philadelphia, it was replaced in Independence Hall in 1778 where it remains today. The bell cracked on July 8, 1835, while tolling the death of Chief Justice John Marshall.

FLOOR LEADERS OF THE SENATE

Source: United States Senate, Secretary for the Majority.

Democratic

Thomas S. (Va.) Maj. 1917-19
 , Gilbert M. (Nebr.) Min. 1919-20
 d, Oscar W. (Ala.) Min. 1920-23
 Joseph T. (Ark.) Min. 1923-33
 33-37
 Alben W. (Ky.) Maj. 1937-46
 47-48
 ott W. (Ill.) Maj. 1949-50
 d, Ernest W. (Ariz.) Maj. 1951-52
 Lyndon B. (Tex.) Min. 1953-54
 55-

Republican

Lodge, Henry Cabot (Mass.) Maj. 1919-24
 Curtis, Charles (Kans.) Maj. 1925-29
 Watson, James E. (Ind.) Maj. 1929-33
 McNary, Chas. L. (Oreg.) Min. 1933-44
 White, Wallace H., Jr. (Me.) Min. 1944-47
 Maj. 1947-48
 Wherry, Kenneth S. (Nebr.) Min. 1949-51
 Bridges, Styles (N. H.) Min. 1951-52
 Taft, Robert A. (Ohio) Maj. 1953
 Knowland, Wm. F. (Cal.) Maj. 1953-54
 Min. 1955-58
 Dirksen, Everett McK. (Ill.) Min. 1959-

aj. stands for Majority Leader, Min., for Minority Leader.

SPEAKERS OF THE HOUSE OF REPRESENTATIVES

Source: Congressional Directory.

Name and state	Congress	Dates served	Name and state	Congress	Date served
Frederick A. C. Muhlenberg (Pa.)	1	1789-1791	Galusha A. Grow (Pa.)	37	1861-1
Jonathan Trumbull (Conn.)	2	1791-1793	Schuyler Colfax (Ind.)	38-40	1862-1
Frederick A. C. Muhlenberg (Pa.)	3	1793-1795	Theodore M. Pomeroy (N. Y.) ⁵	40	1869-1
Jonathan Dayton (N. J.) ¹	4-5	1795-1799	James G. Blaine (Maine)	41-43	1869-1
Theodore Sedgwick (Mass.)	6	1799-1801	Michael C. Kerr (Ind.) ⁶	44	1875-
Nathaniel Macon (N. C.)	7-9	1801-1807	Samuel J. Randall (Pa.)	44-46	1876-
Joseph B. Varnum (Mass.)	10-11	1807-1811	J. Warren Keifer (Ohio)	47	1881-
Henry Clay (Ky.) ²	12-13	1811-1814	John G. Carlisle (Ky.)	48-50	1883-1
Langdon Cheves (S. C.)	13	1814-1815	Thomas B. Reed (Maine)	51	1889-1
Henry Clay (Ky.) ³	14-16	1815-1820	Charles F. Crisp (Ga.)	52-53	1891-1
John W. Taylor (N. Y.)	16	1820-1821	Thomas B. Reed (Maine)	54-55	1895-1
Philip P. Barbour (Va.)	17	1821-1823	David B. Henderson (Iowa)	56-57	1899-1
Henry Clay (Ky.)	18	1823-1825	Joseph G. Cannon (Ill.)	58-61	1903-1
John W. Taylor (N. Y.)	19	1825-1827	Champ Clark (Mo.)	62-65	1911-1
Andrew Stevenson (Va.) ⁴	20-23	1827-1834	Frederick H. Gillett (Mass.)	66-68	1919-1
John Bell (Tenn.)	23	1834-1835	Nicholas Longworth (Ohio)	69-71	1925-1
James K. Polk (Tenn.)	24-25	1835-1839	John N. Garner (Tex.)	72	1931-1
Robert M. T. Hunter (Va.)	26	1839-1841	Henry T. Rainey (Ill.) ⁷	73	1933-1
John White (Ky.)	27	1841-1843	Joseph W. Byrns (Tenn.) ⁸	74	1935-1
John W. Jones (Va.)	28	1843-1845	William B. Bankhead (Ala.) ⁹	74-76	1936-1
John W. Davis (Ind.)	29	1845-1847	Sam Rayburn (Tex.)	76-79	1940-1
Robert C. Winthrop (Mass.)	30	1847-1849	Joseph W. Martin, Jr. (Mass.)	80	1947-1
Howell Cobb (Ga.)	31	1849-1851	Sam Rayburn (Tex.)	81-82	1949-1
Linn Boyd (Ky.)	32-33	1851-1855	Joseph W. Martin, Jr. (Mass.)	83	1953-1
Nathaniel P. Banks (Mass.)	34	1855-1857	Sam Rayburn (Tex.)	84-	1955-
James L. Orr (S. C.)	35	1857-1859			
Wm. Pennington (N. J.)	36	1859-1861			

¹ George Dent (Md.) was elected Speaker pro tempore for Apr. 20 and May 28, 1798. ² Resigned during 2d sess. of 13th Congress. ³ Resigned between 1st and 2d sessions of 16th Congress. ⁴ Resigned during 1st session of 23d Congress. ⁵ Elected Speaker and served the day of adjournment. ⁶ Died between 1st and 2d sessions of 44th Congress. During 1st session, there were two Speakers pro tempore: Samuel S. Cox (N. Y.), appointed for Feb. 17, May 12, June 19, 1876, and Milton Saylor (Ohio), appointed for June 4, 1876. ⁷ Died 1934 after adjournment of 2nd sess. of 73rd Congress. ⁸ Died during 2d session of 74th Congress. ⁹ Died during 3d session of 76th Congress.

Principal Bills and Treaties Since 1900

PARTY ABBREVIATIONS

Dem.—Democratic
Rep.—RepublicanA.L.—American Labor
F.L.—Farmer-LaborInd.—Independent
Prog.—ProgressiveProh.—Prohibit.
Soc.—Socialist

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Hay-Pauncefote Treaty. England agreed the U. S. can build and control an Isthmian canal open to all nations on equal terms (ratified Dec. 16, 1901).		No vote required		72	6	Nov. 1, 1901
Hay-Bunau-Varilla Treaty. Granted the U. S. a ten-mile strip in Panama in perpetuity for \$10,000,000 in gold and an annuity of \$250,000.	Dem. Rep.	No vote required		9 41	15 1	Mar. 1, 1903
Pure Food and Drug Act. Made shipments in interstate commerce of adulterated foods and drugs illegal.		240	17	63	4	June 3, 1906
Immigration Act. Barred paupers, anarchists, criminals and diseased persons.						Mar. 2, 1910
Glass-Owen Bill. Established a Federal Reserve system.		298	60	43	25	Dec. 2, 1913
Federal Trade Commission. Established to enforce anti-trust laws.		No roll-call vote		53	16	Sept. 2, 1914

Treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Trust Act. Prohibited monopolistic pricing, restrictive sales or leases, interlocking holding, interlocking directorates of companies capitalized at \$1,000,000 or exempted labor from antitrust laws and deceitful picketing legal.		244	54	35	24	Oct. 15, 1914
Loan Act. Created system of land banks to loan to farmers on their land and permanent rentals.		No roll-call vote		58	5	July 17, 1916
Act. Forbade shipping in interstate commodities produced by children. (Declared unconstitutional in 1918.)		337	46	52	12	Sept. 1, 1916
Act. Limited working hours of railroad employees to 8 per day on interstate railroads.		259	36	43	28	Sept. 3-5, 1916*
Migration Bill. Required literacy test for immigrants.		308	87	64	7	Vetoed, Jan. 29, 1917
		(Reconsideration vote)				1917
		285	106	62	19	Feb. 5, 1917
Act. Allowed American vessels to be in foreign zones.		...	...	Filibustered		Defeated, Mar. 4, 1917
Act. Against Germany (World War I).		373	50	82	6	Apr. 6, 1917
Prohibition Act (Volstead Act). Prohibited manufacture and sale of beverages containing more than .5 per cent alcohol.		321	70	Voice vote approval		Vetoed, Oct. 27, 1919
		(Reconsideration vote)				1919
		176	55	65	20	Oct. 28, 1919
Act. Prohibited sailless.	Dem. Rep.	No vote required		4	42	Defeated, Nov. 19, 1919
				35	13	1919
Act. Prohibited sailless.	Dem. Rep.	No vote required		21	23	Defeated, Mar. 19, 1920
				28	12	1920
Quota Act. Limited annual number of immigrants from any country to 3 per cent of that nation's population in U. S. in 1910. (Renewed in 1922 for two years.)		No record vote		78	1	May 19, 1921
Emergency Credit Act. Lent money to farmers for 75 per cent of value of harvested crops in 1923.		277	3	No record vote		Mar. 4, 1923
Provided 20-year endowment policies for	Dem. Rep.	177	20	32	9	Vetoed, May 15, 1924
	F.L.	1	...	2	..	1924
	Soc.	1	...	..	..
	Ind.	1	...	..	..
		(Reconsideration vote)				
	Dem. Rep.	145	21	27	9	May 19, 1924
	F.L.	166	57	30	17	
	Soc.	...	...	2	..	
	Ind.	1	...	..	..
Quota Law. Limited annual number of immigrants to 2 per cent of each country's residents in 1890. After 1927, the number was to be reduced to 150,000. Did not apply to nations of Western Hemisphere.		308	58	69	9	May 26, 1924
League of Nations membership.	Dem. Rep.	No vote required		86	2	Jan. 27, 1926
	F.L.			40	14	1926
				..	1	
Act. Outlawed wars and prescribed penalties for international disputes.		No vote required		85	1	Jan. 15, 1929

* On Sunday, the bill was re-signed on the following Tuesday.

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Agricultural Marketing Act. Created federal farm board with power to lend money to farm co-operatives and to create stabilization corporations to buy farm surplus and to store and sell abroad to maintain prices.	Dem. Rep. F.L.	121 245 1	32 2 ...	33 21 ..	2 32 ..	June 15, 1929
Hawley-Smoot Tariff. Very high protective tariff, averaging 40.08 per cent but giving President power to initiate reduction or increase in rates.	Dem. Rep. F.L.	14 208 ...	132 20 1	5 39 ..	30 11 1	June 17, 1930
War Debt Moratorium. Provided for moratorium on payment of interest and war debt installments by nations indebted to U. S.	Dem. Rep. F.L.	120 196 1	95 5 ...	33 36 ..	6 6 ..	Dec. 25, 1931
Reconstruction Finance Corporation. Established with a working fund of \$500,000,000 and power to borrow more to release frozen assets in banks and mortgage companies and to help bankrupt railroads.	Dem. Rep.	153 182	43 12	29 34	5 3	Jan. 22, 1932
Norris-LaGuardia Act. Limited granting of injunctions against labor; required open testimony in open court and outlawed yellow dog contracts.		363	13	75	5	Mar. 23, 1932
3.2 Percent Liquor Law. Legalized manufacture and sale of 3.2 wines and beers.	Dem. Rep.	No record vote		33 10	19 17	Mar. 22, 1933
Civilian Conservation Corps. Created to relieve unemployment and to work at reforestation, road building and flood control.		No roll-call vote		No roll-call vote		Mar. 31, 1933
Agricultural Adjustment Act. Created the AAA, which was authorized to limit acreage on specified crops at farmers' option and to pay benefits to farmers; money for this purpose to be raised by a process tax, which was declared unconstitutional Jan. 16, 1936.		315	98	52	31	May 12, 1933
Tennessee Valley Authority. Established to develop and sell electric power, to serve as yardstick for electricity rates, to develop rural electrification, to establish flood control, and to produce fertilizer.	Dem. Rep. F.L.	284 17 5	2 89 ...	48 14 1	3 17 ..	May 18, 1933
Federal Securities Act. Required that all stock and bond issues be registered and approved.		No roll-call vote		No roll-call vote		May 27, 1933
Home Owners Refinancing Act. Established the HOLC, which took over mortgages in exchange for bonds in order to save home owners from losing homes.		383	4	No record vote		June 13, 1933
Glass-Steagall Banking Act. Created Federal Deposit Insurance Corporation to insure deposits up to \$5000 (later \$10,000); required that private banks be either investment or deposit banks, but not both.		No record vote		No roll-call vote		June 16, 1933
National Industrial Recovery Act. Created NRA; authorized establishment of trade associations; suspended antitrust laws; authorized drawing-up of codes of Fair Competition to be accepted by President; guaranteed collective bargaining and required employers to accept approved maximum and minimum wage provisions. (Declared unconstitutional in 1935.)	Dem. Rep. F.L.	266 53 4	25 50 ...	46 10 1	4 20 ..	June 16, 1933
Gold Reserve Act. Gave President power to devalue gold and to impound for treasury all gold in Federal System and to establish Exchange Stabilization Fund.	Dem. Rep. F.L.	287 68 5	2 38 ...	55 10 1	1 22 ..	Jan. 30, 1934
Farm Mortgage Refinancing Act. Created Federal Farm Mortgage Corporation to assist farmers in payment of mortgages on easier interest terms.		No record vote		No record vote		Jan. 31, 1934
Tydings-McDuffie Act. Gave the Philippine Islands independence.	Dem. Rep. F.L.	No roll-call vote		51 16 1	.. 8 ..	Mar. 24, 1934
Securities and Exchange Act. Established Securities and Exchange Commission; required licensing of stock exchanges; made certain speculative practices illegal; gave Federal Reserve Board power to fix margins; required full financial statements from registered companies.	Dem. Rep. F.L.	254 22 4	11 73 ...	47 15 ..	1 12 ..	June 6, 1934

Treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Emergency Act. Authorized President to reduce interest as much as 50 per cent of prevailing rates on loans to countries which granted the U. S. most favored nation treatment without the need for Senate ratification for three years.	Dem. Rep. F.L.	No record	vote	51 5 1	5 28 ..	June 12, 1934
Emergency Housing Act. Created Federal Housing Administration to administer funds for modernizing homes and for new construction.		176	19	No record	vote	June 28, 1934
Emergency Bankruptcy Act (Frazier-Lemke Act). Declaration of moratorium on farm mortgage foreclosures. Declared unconstitutional in May, 1935.)		No record	vote	60	16	June 28, 1934
Emergency War Relocation Act. (Defeated in Senate by lack of majority vote.)	Dem. Rep. F.L. Prog.	No vote	required	43 9	20 14 1 1	Defeated, Jan. 29, 1935
Emergency Labor Relations Act (Wagner-Connery Act). Established NLRB with power to determine appropriate bargaining unit subject to elections they requested of the workers; to certify the national trade union and to take testimony about employer practices and issue cease and desist orders.	Dem. Rep. F.L. Prog.	No record	vote	49 12 1 1	4 8	July 5, 1935
Emergency Social Security Act. Created social security board to administer old age benefits based on earnings before 1935; unemployment administered under new law and grants to states to aid the needy aged, blind, and widows, etc.		372	33	76	6	Aug. 14, 1935
Emergency Economic Act of 1935. Increased power of Federal Reserve Board of Governors over open market and currency transactions.		No record	vote	No record	vote	Aug. 23, 1935
Emergency Securities Act (Wheeler-Rayburn Act). Required all securities to register with the SEC and limited exemptions for corporations to first degree unless they required greater complexity.	Dem. Rep. F.L. Prog.	203 7 3 6	59 83	No record	vote	Aug. 26, 1935
Emergency Eviction Moratorium Act. Allowed three-year moratorium on foreclosures with court permission for payment of reasonable rental.		No record	vote	No record	vote	Aug. 29, 1935
Emergency Arms Act. Allowed President, for 6 months, to prohibit export of arms, etc. (or their transportation by rail or water) to belligerent countries.		211	83	79	2	Aug. 31, 1935
Emergency War Relocation Bill. Made 9-year 3-per cent bonds redeemable on demand.	Dem. Rep. F.L. Prog.	265 72 3 6	29 30	56 15 2 1	9 7	Vetoed, Jan. 24, 1936
				(Reconsideration vote)		
	Dem. Rep. F.L. Prog.	248 66 3 7	32 29	57 16 2 1	12 7	Jan. 27, 1936
Emergency War Relocation and Domestic Allotment Act. Granted 100-acre allotment to farmers who let their land lie fallow or use for other crops.	Dem. Rep. F.L. Prog.	246 20 1 ...	25 64 1 7	49 5 1 1	9 11	Mar. 2, 1936
Emergency Trade Agreement Act. Extended to June, 1937, the period during which President is authorized to negotiate trade agreements under Trade Agreements Act of 1934.		284	0	58	24	Mar. 1, 1937
Emergency War Relocation Act. Forbade export of arms and ammunition to belligerents; the sale in this country of belligerents' ships for carrying arms; required belligerents to pay upon purchase of arms purchases in their own ships (cash and arms).		377	12	41	15	May 1, 1937

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Judiciary Act. Allowed voluntary retirement of Supreme Court justices and other federal court judges on full pension at age of 70.		No roll-call vote		Unanimous, no roll-call vote		Aug. 25, 1937
National Housing Act. Established the U. S. Housing Authority to administer loans to local communities and states for rural and urban construction. (Amended in 1938.)		275	86	64	16	Sept. 1, 1937
Agricultural Adjustment Act. Continued soil conservation program; provided parity payments and commodity loans to farmers; established crop insurance corporations and ever-normal granary plan.	Dem.	243	54	53	17	Feb. 16, 1936
	Rep.	14	74	2	11	
	F.L.	5	...	...	2
	Prog.	1	7	...	1	
	Ind.	...	...	1	...
Wage and Hours Act. Provided minimum wage of 25 cents to rise to 40 cents after 6 years; limited hours from 44 per week the first year to 40 after the third year; goods produced by "oppressive child labor" could not be shipped in interstate commerce.	Dem.	247	41	No record vote		June 25, 1938
	Rep.	31	48			
	F.L.	5	...			
	Prog.	7	...			
Alien Registration Act (Smith Act). Required fingerprinting of all aliens in U. S.; made it unlawful for anyone to advocate or teach overthrow of U. S. government or to belong to any group advocating such.		382	4	No record vote		June 22, 1940
Selective Service Act. Established system for compulsory service in armed forces. (Extended in 1941.)	Dem.	211	33	50	17	Sept. 16, 1940
	Rep.	52	112	8	10	
	F.L.	...	1	...	2	
	Prog.	...	2	...	1	
	Ind.	...	...	...	1
	A.L.	...	1	...	...
Lend-Lease. Provided system whereby U. S. lent goods and munitions to democratic nations in return for services and goods.		260	165	60	31	Mar. 11, 1941
Selective Service Act Extension. Extended period of service to not more than 30 months in time of peace and eliminated 900,000-man limit of Army.	Dem.	182	65	38	16	Aug. 18, 1941
	Rep.	21	133	7	13	
	Prog.	...	3	...	1	
	A.L.	...	1	...	...
Declarations of World War II: Against Japan.	Dem.	235	...	56	...	Dec. 8, 1941
	Rep.	149	1	24	...	
	Prog.	3	...	1	...	
	Ind.	...	...	1	...
	A.L.	1	...	...	...
Against Germany.		393	0	88	0	Dec. 11, 1941
U. N. Charter ratification. (For full text of Charter, see index.)	Dem.	No vote required		53	...	July 28, 1945
	Rep.			35	2	
	Prog.			1	...	
Case Bill. Would have set up mediation board, established enforceable 30-day cooling-off periods in labor disputes, outlawed boycotts and sympathy strikes, and authorized court injunctions.	Dem.	97	91	33	13	Vetoed, June 11, 1946
	Rep.	133	13	28	6	
	Prog.	...	1	...	1	
	A.L.	...	1	...	...
(Defeated in House by lack of 2/3 majority to override veto.)		(Reconsideration vote)				Defeated June 11, 1946
	Dem.	96	118	...	...
	Rep.	159	15			
	Prog.	...	1			
	A.L.	...	1			
British Loan Act. Established \$3,750,000,000 credit to Britain, including \$650,000,000 in lend-lease.	Dem.	157	32	29	15	July 15, 1946
	Rep.	61	122	17	18	
	Prog.	...	1	...	1	
	A.L.	1	...	...	...
Atomic Energy Commission. Created five-man controlled commission without military representation but with military liaison; permitted Army and Navy to make atomic weapons; forbade distribution of fissionable materials or atomic energy information.		No record vote		No record vote		Aug. 1, 1946

Treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Emergency Aid Bill. Authorized \$400,000,000 to furnish Greece and Turkey upon application, withdrawal upon request of countries, of the Security Council or General Assembly, or of if improperly used or unnecessary.	Dem. Rep. A.L.	160 127 ...	13 93 1	32 35 ..	7 16 ..	May 22, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.	Dem. Rep.	No vote required		37 42	3 7	June 14, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		No vote required		Voice vote approval		June 14, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		No vote required		Voice vote approval		June 14, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		No vote required		Voice vote approval		June 14, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.	Dem. Rep. A.L.	103 217 ...	66 12 1	17 37 ..	15 2 ..	Vetoed, June 20, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.	Dem. Rep. A.L.	106 225 ...	71 11 1	20 48 ..	22 3 ..	June 23, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		365	11	50	35	July 18, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		Voice vote approval		Voice vote approval		July 26, 1947
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.	Dem. Rep. A.L.	150 167 0	11 62 2	Voice vote approval		Apr. 3, 1948
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		259	136	Voice vote approval		June 24, 1948
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		Voice vote approval		Voice vote approval		June 25, 1948
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		318	62	Voice vote approval		June 28, 1948
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		351	9	Voice vote approval		Aug. 10, 1948
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.	Dem. Rep. A.L.	Voice vote approval		42 26 ..	0 9 ..	Jan. 19, 1949
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		Voice vote approval		Voice vote approval		Apr. 19, 1949
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		Voice vote approval		Voice vote approval		July 15, 1949
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.	Dem. Rep.	No vote required		50 32	2 11	July 21, 1949
Emergency Relief Act. Authorized \$100,000,000 for relief of Greece, Turkey, and other countries.		356	7	Voice vote approval		Aug. 10, 1949

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Military Assistance Program. Authorized \$1,314,010,000 in military aid: for Atlantic Pact countries, \$1 billion; Greece and Turkey, \$211,370,000; "general area" of China, \$75,000,000; and South Korea, Iran and Philippines, \$27,640,000.	Dem. Rep. A.L.	172 51 0	24 84 1	Voice vote approval		Oct. 26 1949
Foreign-aid appropriations: \$5,809,990,000, consisting of \$4,852,380,000 for ERP, \$912,500,000 for Army-occupied areas, \$45,000,000 for Greek-Turkish aid, and \$110,000 for joint Congressional Foreign-Aid Committee.		Voice vote approval		Voice vote approval		Oct. 2 1949
Minimum-wage bill. Raised minimum wage from 40c to 75c an hour.		131	19	Voice vote approval		Oct. 28 1949
Farm bill. Supported prices for wheat, corn, cotton, rice, peanuts at 90% of parity through 1950, 80-90% through 1951, and 75-90% on sliding-scale basis thereafter.		175	34	46	7	Oct. 31 1949
Natural-gas bill (Kerr bill). Would have prevented FPC control on prices for natural gas distributed by interstate pipelines.		176	174 (No reconsideration vote)	44	38	Vetoed Apr. 15 1950
Housing bill. Authorized over \$3.5 billion in government loans and mortgage insurance for expansion of housing program. Also turned over to state and local authorities about 150 wartime and veterans' housing projects.		Voice vote approval		Voice vote approval		Apr. 20 1950
Bill to increase Air Force and Army. Expanded Air Force to 70 groups and from 410,000 to 502,000 men; expanded Army from 592,000 to 837,000 men.		315	4	76	0	July 11 1950
Social Security bill. Will raise present employer's and employee's 1½% payroll tax to 2% in 1954, 2½% in 1960, 3% in 1965, and 3¾% in 1970; provided financial aid to permanently disabled persons in need.		374	1	Voice vote approval		Aug. 28 1950
Omnibus appropriations bill. Appropriated \$35.554 billion, including \$62.5 million loan to Spain, \$14,680,084,443 for Defense Dept., \$1.225 billion for rearming Western Europe, \$2.526 billion for Marshall plan, \$26.9 million for Point-4 program.		Voice vote approval		Voice vote approval		Sept. 6 1950
Defense Production Act of 1950. Gave President power to curb prices, wages, and consumer credit, and to increase defense production.		Voice vote approval		Voice vote approval		Sept. 8 1950
Bill to draft doctors, dentists, etc., up to 50 years of age, for 21-mo. service.		Voice vote approval		Voice vote approval		Sept. 9 1950
Internal Security Act of 1950. Provided for registering of Communists and their internment in times of emergency.	Dem.	186	18	24	6	Vetoed
	Rep.	126	1	27	1	Sept. 22
	A.L.	0	1	...	...	1950
		(Reconsideration vote)				
	Dem.	161	45	26	10	Sept. 23
	Rep.	125	2	31	0	1950
	A.L.	0	1	...	...
Emergency defense-appropriations bill. Appropriated \$17,099,902,285, including \$3.734 billion for Navy, \$3.166 billion for Army, \$260 million for atomic-weapon research, etc.		286	30	Voice vote approval		Sept. 27 1950
Civil-defense bill. Provided \$3.1 billion to be supplemented by state and local governments for bomb shelters and other civil defense.		Voice vote approval		Voice vote approval		Jan. 12 1951
GI insurance law. Provided free \$10,000 life insurance to all armed-forces personnel.		Voice vote approval		Voice vote approval		Apr. 25 1951
Reciprocal Trade Agreements Act. Extended reciprocal trade agreement act to June 12, 1953, and directed President to end any concessions to Soviet bloc.		Voice vote approval		Voice vote approval		June 16 1951
Draft act. Extended draft to July 1, 1955, and increased service to 24 months; provided preliminary study for universal military service.		339	41	Voice vote approval		June 19 1951
Pension bill. Raised to \$120 a month the \$60-\$72 pensions to veterans disabled by nonservice disabilities.		Voice vote approval		Voice vote approval		Vetoed Aug. 6 1951
		(Reconsideration vote)				
		318	45	69	9	Sept. 13 1951

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Resolution. Declared state of war with Germany.		376	0	Voice vote approval		Oct. 19, 1951
Law amendment. Permitted union-shop contract first polling employees.		307	18	Voice vote approval		Oct. 22, 1951
Authorized exchange of certain nonweapon with friendly nations.		Voice vote approval		Voice vote approval		Oct. 30, 1951
Military Appropriation Bill. \$7,328,903,976 voted military and economic aid, including \$100 million for Spain.		Voice vote approval		Voice vote approval		Oct. 31, 1951
Peace Treaty. Formally ended state of war declared, 1941.		No vote required		66	10	Mar. 20, 1952
Bill. Gave clear title to states for submerged mineral deposits off their shores.		247	89 (No reconsideration vote)	50	35	Vetoed, May 29, 1952
Immigration and Nationality Act. Ended open immigration and retained quota system of national origin.		205	53	Voice vote approval		Vetoed, June 25, 1952
			(Reconsideration vote)			
	Dem.	107	90	25	18	June 27, 1952
	Rep.	170	23	32	8	
	Ind.	1	0			
Peace Contracts. Established working basis with Bonn Government.		No vote required		77	5	July 1, 1952
Organic Constitution. Made Puerto Rico a commonwealth and gave it greater home rule.		Voice vote approval		Voice vote approval		July 3, 1952
Trade Tariff Act of 1952. Allowed manufacturers and retailers to mark prices on trade-marked articles where state of origin was indicated.		196	10	64	16	July 14, 1952
"Bill of Rights." Granted Korean veterans with service as of June 27, 1950, rights and benefits those received by veterans of World War II.		322	1	Voice vote approval		July 16, 1952
Welfare Amendment. Increased Social Security benefits by 12½% and authorized pensioners to \$75 a month. Minimum payments set at \$10.		Voice vote approval		Voice vote approval		July 18, 1952
Law. Gave coastal states right to all minerals and lands within their historic boundaries; Federal Government retained control of remainder of continental shelf.	Dem.	97	59	Voice vote approval		May 22, 1953
	Rep.	188	18			
	Ind.	0	1			
Authorization Act. Provided \$4,531,507,000 for economic aid to 53 free countries.	Dem.	126	29	Voice vote approval		Aug. 7, 1953
	Rep.	94	80			
	Ind.	1	0			
Immigration Act. Admitted 214,000 refugees in excess of immigration quotas.		190	44	Voice vote approval		Aug. 7, 1953
Hawaii and Alaska. (Allowed to die in independence referendum.)	Rep.	...	...	3	41	Defeated, 1954
	Dem.	...	...	42	2	
	Ind.	...	...	1	0	
Internal Security. Would have limited President's treaty-making power. (Defeated by lack of ⅔ majority vote.)	Rep.	...	...	32	16	Defeated, Feb. 25, 1954
	Dem.	...	...	28	14	
	Ind.	...	...	0	1	
Internal Security. Would have limited President's treaty-making power. (Defeated by lack of ⅔ majority vote.)		395	1	72	8	Apr. 1, 1954
St. Lawrence Seaway.	Rep.	144	64	Voice vote approval		May 13, 1954
	Dem.	96	94			
	Ind.	1	0			

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Extension of Reciprocal Trade Act for 1 year.		Voice vote approval		Voice vote approval		June 1959
Public-housing bill. Allowed 35,000 units for year, but limited housing to cities where Federal slum clearance had displaced families.		358	30	59	21	August 1959
Tax revision to cost \$1.363 million in revenue.	Rep.	201	3	42	3	August 1959
	Dem.	114	73	19	22	
	Ind.	0	1	0	1	
Communist Control Act. Outlawed Communist party, though membership in party was not made crime.		265	2	79	0	August 1959
Compromise Mutual Security Appropriation of \$5,243,575,-795, of which \$2,781,499,816 is "new money."		188	77	Voice vote approval		August 1959
Farm bill. Provided flexible price support.		208	47	44	28	August 1959
Amendment to Atomic Energy Act of 1946. Allowed private interests to enter field of atomic power.	Rep.	Voice vote approval		6	35	August 1959
	Dem.			32	6	
	Ind.			1	0	
Social Security benefits increased and extended to additional 10,000,000 persons.		Voice vote approval		Voice vote approval		September 1959
Death penalty for peacetime espionage		Voice vote approval		Voice vote approval		September 1959
Revocation of citizenship of persons convicted by conspiracy to overthrow government by force.		Voice vote approval		Voice vote approval		September 1959
Federal pay raise bill. Raised salaries of Senate and House members to \$22,500; Vice President and House Speaker to \$35,000 (plus additional \$10,000 for expenses); Justices of U. S. Supreme Court to \$35,000; etc.	Dem.	119	53	Voice vote approval		May 1959
	Rep.	104	60			
Military pay raise bill. Provided pay raise for armed services amounting to \$745 million per year.		Voice vote approval		Voice vote approval		May 1959
Postal pay raise bill. Increased pay of postal workers by average of 8%.		407	1	78	0	June 1959
Selective Service bill. Extended draft 4 years and doctors' draft 2 years.		388	5	Voice vote approval		June 1959
Funds for Dixon-Yates transmission line included in appropriations bill.		Voice vote approval		Voice vote approval		Can. July 1959
Military reserves bill. Raised present 800,000-man reserve to 2,900,000 by mid-1959.	Dem.	169	38	Voice vote approval		August 1959
	Rep.	146	40			
Housing bill. Authorized construction of 45,000 public-housing units by mid-1956.	Dem.	153	37	Voice vote approval		August 1959
	Rep.	35	131			
Federal minimum-wage bill. Increased minimum from 75¢ to \$1 per hour.	Dem.	192	29	Voice vote approval		August 1959
	Rep.	170	25			
Harris-Fulbright bill. Would have exempted natural-gas producers from direct Federal rate control.	Dem.	86	136	22	24	February 1959
	Rep.	123	67	31	14	
		(No reconsideration vote)				
Upper Colorado River project bill. Authorized \$756 million for irrigation and reclamation in Upper Colorado River basin.		Voice vote approval		Voice vote approval		April 1959
Agricultural Act of 1956. Would have set up "soil bank" program and would have restored high rigid support prices.	Dem.	189	35	35	4	February 1959
	Rep.	48	146	15	31	April 1959
(Defeated in House by lack of 2/3 majority vote to override veto.)		(Reconsideration vote)				Defeat April 1959
	Dem.	182	38	...	...
	Rep.	20	173	...	...
Authorization of \$1.2 billion "soil bank" program for paying farmers to withdraw acres from production.	Dem.	172	12	Voice vote approval		May 1959
	Rep.	132	47			

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
army bill. Called for expenditure of \$33.482 billion for building (\$28.057 billion Federal expenditure and \$5 billion outlay by states).		Voice vote approval		89	1	June 29, 1956
air-defense bill. Appropriated \$34.6 billion for national defense, including \$16.5 billion for Air Force.		377	0	88	0	July 2, 1956
education bill. Would have provided \$1.6 billion in Federal aid for school construction.	Dem. Rep.	119 75	105 119	...	...	Defeated, July 5, 1956 ^a
foreign aid authorization bill. Authorized \$4 billion for foreign aid program for another year.		No record vote		No record vote		July 18, 1956
labor security bill. Made women eligible for benefits at 62, disabled workers at 50.		Voice vote approval		Voice vote approval		Aug. 1, 1956
housing bill. Provided for 70,000 new Federally subsidized housing units for next 2 years and liberalized Federal aid for private housing.		Voice vote approval		Voice vote approval		Aug. 7, 1956
Foreign Policy. Provided economic and military aid for underdeveloped nations.		350	60	73	19	Mar. 9, 1957
housing bill. Permitted lower minimum down payments on government-insured housing: 3% on 1st \$10,000 of appraised value, 15% on next \$6,000, 30% on next \$4,000.		Voice vote approval		Voice vote approval		July 12, 1957
International Atomic Energy Agency (IAEA).	Dem. Rep.	No vote required		35 32	9 10	July 29, 1957
authorizing New York State to build \$600-million, 1,000-kw power plant at Niagara Falls.		313	75	Voice vote approval		Aug. 21, 1957
security appropriations bill. Provided \$2,768,760,000 for new funds and \$667,050,000 in carry-over funds.		194	122	59	19	Sept. 3, 1957
protecting FBI files from unrestricted use by defendants in criminal cases.		351	0	74	2	Sept. 3, 1957
Civil Rights Act of 1957. Created 6-member Civil Rights Commission; provided for additional Assistant Attorney General to head special Civil Rights section within Justice Department; barred interference with voting rights.	Dem. Rep.	128 151	82 15	23 37	15 0	Sept. 9, 1957
housing bill. Provided \$1.85 billion to stimulate housing construction.		Voice vote approval		86	0	April 1, 1958
budget bill. Added \$1.8 billion to previous appropriations.		Voice vote approval		Voice vote approval		April 16, 1958
postal rates and pay raise bill. Increased first-class mail rates 3c to 4c per oz., etc. Provided 7½% pay raise to postal employees.		379	0	88	0	May 27, 1958
unemployment bill. Extended by 50% the duration of unemployment benefits for those who had exhausted their benefits. Provided on loan basis to the states, to be repaid by them.	Dem. Rep.	60 163	148 17	}88		June 4, 1958
Alaska statehood bill. (Alaska has also approved.)	Dem. Rep.	117 91	81 85	31 33	13 7	July 7, 1958
tariff trade bill. Extended program for 4 years; gave President power to reduce tariffs on retaliatory goods by 20%.	Dem. Rep.	}161		40 32	6 12	Aug. 20, 1958
old-age pension bill. Gave \$25,000 annually to ex-servicemen and \$10,000 to their widows.		165	45	Voice vote approval		Aug. 25, 1958
budget bill. Appropriated \$3.3 billion for fiscal 1959, \$644 million in carryover.	Dem. Rep.	Voice vote approval		25 26	9 8	Aug. 29, 1958
debt limit rise. Raised limit to \$283 billion permanently and \$288 billion temporarily.		Voice vote approval		57	20	Sept. 2, 1958
education bill. Provided loans and fellowships to teachers and guidance counselors; encouraged foreign language study. (\$800 million over 4 years.)	Dem. Rep.	Voice vote approval		37 29	7 8	Sept. 2, 1958
admitting Hawaii as 50th state.	Dem. Rep.	203 120	65 24	46 30	14 1	Mar. 18, 1959

Bill or treaty	Party	House vote		Senate vote		Disposition
		Yea	Nay	Yea	Nay	
Extension of draft for four years, until July 1, 1963.	Dem. Rep.	Voice vote approval		61 30	0 1	Mar. 1
Debt limit rise. Raised limit to \$285 billion permanently and to \$295 billion temporarily.	Dem. Rep.	167 88	69 48	Voice vote approval		June 1
Foreign aid bill. Authorized \$3.6 billion for fiscal 1960.	Dem. Rep.	182 89	83 59	Voice vote approval		July 1
Veterans' pension revision. Increased and revised payments on basis of incomes.		Voice vote approval		Voice vote approval		Aug. 1
Public works appropriation bill. Appropriated \$1,185,309,903 for fiscal 1960.	Dem. Rep.	266 46	4 89	55 18	1 14	Vote Sept. 1
(First Eisenhower veto to be overridden.)	Dem. Rep.	260 20	5 116	60 12	2 21	Sept. 1
Labor Reform Act of 1959. Guaranteed more democratic union procedure, etc.	Dem. Rep.	214 138	51 1	} 95		Sept. 1
Farm surplus bill. Extended for two years program of disposing of surplus farm products overseas; authorized "food stamp" plan through which \$250 million worth of surplus food would be distributed annually for two-year period to needy Americans.		Voice vote approval		Voice vote approval		Sept. 1
Gasoline tax bill. Raised Federal tax on gasoline from 3¢ to 4¢ per gallon for 21 months starting Oct. 1, 1959.		Voice vote approval		70	11	Sept. 1
Housing bill (third proposed). Authorized \$1 billion, including \$650 million for slum clearance in two-year period.		Voice vote approval		86	7	Sept. 1
Civil rights bill. Made obstruction of integration in schools a crime and set up Federal referees in voter-registration disputes.	Dem. Rep.	179 132	94 15	42 29	18 0	Mar. 1
U.S.-Japanese Security Treaty. New mutual security treaty with Japan ratified despite Japanese student riots.	Dem. Rep.	No vote required		} 90		July 1
Federal pay raise bill. Passed over President's veto (second Eisenhower veto overridden). Raised Federal employees pay 7½%.	Dem. Rep.	256 89	13 56	55 19	9 15	July 1
Antarctic treaty. Twelve-country (including U.S.S.R.) agreement on use of Antarctic for continued scientific research.	Dem. Rep.	No vote required		38 28	17 4	Aug. 1
Foreign aid bill. Provided \$3.98 billion for mutual security.	Dem. Rep.	105 107	138 34	41 26	19 7	Sept. 1
Health care for aged bill. Provided \$202 million in Federal aid to match \$61 million from states. The medical aid funds will cover about 1.4 million needy persons over 65.	Dem. Rep.	244 137	16 7	59 32	1 1	Sept. 1

¹ Passed with added provisions and sent back to House. ² Dixon-Yates contract ordered canceled by President and funds dropped by Congress from appropriations bill. ³ Bill killed, since all money bills must originate in House.

CONGRESSIONAL COMMITTEES

Information is based on the organization of the Eighty-sixth Congress. It is subject to some changes when the new Congress convenes.

Committees of the Senate

Agriculture and Space Sciences (15 members)
Chairman: Lyndon B. Johnson (Tex.)
Ranking Rep.: Styles Bridges (N. H.)

Conservation and Forestry (17 members)
Chairman: Allen J. Ellender (La.)
Ranking Rep.: George D. Aiken (Vt.)

Education (27 members)
Chairman: Carl Hayden (Ariz.)
Ranking Rep.: Styles Bridges (N. H.)

Finance and Banking (17 members)
Chairman: Richard B. Russell (Ga.)
Ranking Rep.: Leverett Saltonstall (Mass.)

Internal Revenue (15 members)
Chairman: A. Willis Robertson (Va.)
Ranking Rep.: Homer E. Capehart (Ind.)

Foreign Relations (17 members)
Chairman: Alan Bible (Nev.)
Ranking Rep.: J. Glenn Beall (Md.)

Health, Education and Labor (17 members)
Chairman: Harry Flood Byrd (Va.)
Ranking Rep.: John J. Williams (Del.)

Intelligence (17 members)
Chairman: J. W. Fulbright (Ark.)
Ranking Rep.: Alexander Wiley (Wis.)

Government Operations (9 members)
Chairman: John L. McClellan (Ark.)
Ranking Rep.: Karl E. Mundt (S. D.)

Interior and Insular Affairs (15 members)
Chairman: James E. Murray (Mont.)
Ranking Rep.: Henry C. Dworshak (Idaho)

Interstate and Foreign Commerce (17 members)
Chairman: Warren G. Magnuson (Wash.)
Ranking Rep.: Andrew F. Schoeppel (Kan.)

Judiciary (15 members)
Chairman: James O. Eastland (Miss.)
Ranking Rep.: Alexander Wiley (Wis.)

Labor and Public Welfare (15 members)
Chairman: Lister Hill (Ala.)
Ranking Rep.: Barry Goldwater (Ariz.)

Post Office and Civil Service (9 members)
Chairman: Olin D. Johnston (S. C.)
Ranking Rep.: Frank Carlson (Kan.)

Public Works (15 members)
Chairman: Dennis Chavez (N. M.)
Ranking Rep.: Francis Case (S. D.)

Rules and Administration (9 members)
Chairman: Thomas C. Hennings, Jr. (Mo.)
Ranking Rep.: Carl T. Curtis (Neb.)

Committees of the House

Agriculture (36 members)
Chairman: Harold D. Cooley (N. C.)
Ranking Rep.: Charles B. Hoeven (Iowa)

Education (50 members)
Chairman: Clarence Cannon (Mo.)
Ranking Rep.: John Taber (N. Y.)

Finance and Banking (39 members)
Chairman: Carl Vinson (Ga.)
Ranking Rep.: Leslie C. Arends (Ill.)

Internal Revenue (30 members)
Chairman: Brent Spence (Ky.)
Ranking Rep.: Clarence E. Kilburn (N. Y.)

Foreign Relations (25 members)
Chairman: John L. McMillan (S. C.)
Ranking Rep.: James C. Auchincloss (N. J.)

Health, Education and Labor (30 members)
Chairman: Graham A. Barden (N. C.)
Ranking Rep.: Carroll D. Kearns (Pa.)

Intelligence (32 members)
Chairman: Thomas E. Morgan (Pa.)
Ranking Rep.: Robert B. Chipfield (Ill.)

Government Operations (30 members)
Chairman: William L. Dawson (Ill.)
Ranking Rep.: Clare E. Hoffman (Mich.)

Administration (25 members)
Chairman: Omar Burleson (Tex.)
Ranking Rep.: Paul F. Schenck (Ohio)

Interior and Insular Affairs (33 members)
Chairman: Wayne N. Aspinall (Colo.)
Ranking Rep.: John P. Saylor (Pa.)

Interstate and Foreign Commerce (33 members)
Chairman: Oren Harris (Ark.)
Ranking Rep.: John B. Bennett (Mich.)

Judiciary (32 members)
Chairman: Emanuel Celler (N. Y.)
Ranking Rep.: William M. McCulloch (Ohio)

Merchant Marine and Fisheries (31 members)
Chairman: Herbert C. Bonner (N. C.)
Ranking Rep.: Thor C. Tollefson (Wash.)

Post Office and Civil Service (25 members)
Chairman: Tom Murray (Tenn.)
Ranking Rep.: Edward H. Rees (Kan.)

Public Works (34 members)
Chairman: Charles A. Buckley (N. Y.)
Ranking Rep.: James C. Auchincloss (N. J.)

Rules (12 members)
Chairman: Howard W. Smith (Va.)
Ranking Rep.: Leo E. Allen (Ill.)

Science and Astronautics (25 members)
Chairman: Overton Brooks (La.)
Ranking Rep.: Joseph W. Martin, Jr. (Mass.)

Un-American Activities (9 members)
Chairman: Francis E. Walter (Pa.)
Ranking Rep.: Donald L. Jackson (Calif.)

Veterans' Affairs (25 members)
Chairman: Olin E. Teague (Tex.)
Ranking Rep.: Edith Nourse Rogers (Mass.)

Ways and Means (25 members)
Chairman: Wilbur D. Mills (Ark.)
Ranking Rep.: Richard M. Simpson (Pa.)

BIOGRAPHIES OF THE PRESIDENTS

GEORGE WASHINGTON

was born February 22, 1732 (February 11, 1731/2, old style) in Westmoreland County, Virginia. He early trained as a surveyor; but in 1752 he was appointed adjutant in the Virginia militia, and for the next three years he took an active part in the wars against the French and Indians, serving as General Braddock's aide in the disastrous campaign against Fort Duquesne. In 1759 he resigned from the militia, married Martha Dandridge Custis, a widow, and settled down as a gentleman farmer at Mount Vernon.

As a militiaman, he had been exposed to the arrogance of the British officers, and his experience as a planter with British commercial restrictions increased his anti-British sentiment. He opposed the Stamp Act of 1765 and after 1770 became increasingly prominent in organizing resistance. A delegate to the Continental Congress, Washington was selected as commander in chief of the Continental Army and took command at Cambridge, Massachusetts, on July 3, 1775.

Inadequately supported and sometimes covertly sabotaged by the Congress, in charge of troops who were inexperienced, badly equipped, and impatient of discipline, Washington conducted the war on the policy of avoiding major engagements with the British and wearing them down by harassing tactics. His able generalship, along with the French alliance and the growing weariness within Britain, brought the war to a conclusion with the surrender of Cornwallis at Yorktown on October 19, 1781.

The chaotic years under the Articles of Confederation led Washington to return to public life in the hope of promoting the formation of a strong central government. He presided over the Constitutional Convention and yielded to the universal demand that he serve as first President. In office, he sought to unite the nation in the service of establishing the authority of the new government at home and abroad. Greatly distressed by the emergence of the Hamilton-Jefferson rivalry, he worked to maintain neutrality but actually sympathized more with Hamilton. Following his unanimous re-election in 1792, his second term was dominated by the Federalists. His Farewell Address rebuked party spirit and warned against foreign entanglements.

He died at Mt. Vernon on December 14, 1799. Tall, dignified and impressive, Washington gave a public impression of austerity, though he was capable of gaiety in private. His life was characterized by a

strict sense of duty to his people. Standard biographies are by Fitzpatrick, Ford, Hughes, and Stephenson.

JOHN ADAMS

was born on October 30 (October 18, old style), 1735, at Braintree (now Quincy, Massachusetts). A Harvard graduate considered teaching and the ministry finally turned to law and was admitted to the bar in 1758. He opposed the Stamp Act, served as lawyer for patriots indicted by the British and, by the time of the Continental Congresses, was in the vanguard of the movement for independence. In 1776 he went to France as commissioner. Subsequently he helped negotiate the 1783 treaty with Britain, and in 1785 became the U. S. envoy to London. Resigning in 1788, he was elected Vice President in 1789. Washington, and was re-elected in 1793.

Though a Federalist, Adams did not align with Hamilton, who sought to prevent his election to the presidency in 1796 and thereafter intrigued against his administration. Adams was chosen with electoral votes to 68 for his closest competitor, Thomas Jefferson, who became Vice President. In 1798 Adams' independent policy averted a war with France. He completed the break with Hamilton and the right-wing Federalists while, at the same time, the enactment of the Alien and Sedition Acts, directed against foreigners and against critics of the government, exasperated the Jeffersonian opposition. The split between Adams and Hamilton was deepened when Adams elected Jefferson in 1800. Adams retired to his home in Quincy, Massachusetts, but later corresponded with Jefferson and died on the same day, July 4, 1826.

Stout, somewhat vain and irascible, Adams was honest, fearless and essentially fair-minded. His *Defence of the Constitution of Government of the United States* (1787) contains original and striking conservative political ideas. He married Abigail Smith in 1764, and their life together was long and happy. The standard biographies are by Morse and Chittenden.

THOMAS JEFFERSON

was born on April 13 (April 2, old style), 1743, at Shadwell in Goochland (now Gloucester) County, Virginia. A William and Mary graduate, he studied law but from the start showed an interest in science and philosophy. His literary skill and intellectual clarity brought him to the fore

the revolutionary movement in Virginia. He was elected to the Continental Congress, where he drafted the Declaration of Independence. In 1776 he entered the Virginia House of Delegates and initiated a comprehensive reform program for the abolition of feudal rights in land tenure and the separation of church and state.

In 1779 he became governor, but constitutional limitations on his power combined with his own lack of executive ability caused an unsatisfactory administration, culminating in Jefferson's virtual ouster when the British invaded Virginia in 1781. He now retired to his beautiful estate at Monticello, to his wife, Martha Jefferson Skelton, whom he had married in 1772 and who died in 1782, and to his children.

Jefferson's *Notes on Virginia* (1784-85) reflect his many-faceted interests, his insatiable intellectual curiosity, his deep interest in agrarian democracy. Sent to Congress in 1783, he helped lay down the basic principles of the new system and drafted basic reports on the organization of the western lands. In 1785 he was appointed minister to France, where the Anglo-Saxon liberalism derived from Locke was stimulated in contact with the thought which would ferment in the French Revolution. In 1790 Washington appointed him Secretary of State. While favoring the Constitution and a strengthened central government, Jefferson came to believe that Hamilton contemplated the establishment of a monarchy. Growing differences resulted in Jefferson's resignation on Dec. 31, 1793. He was elected Vice President in 1796, Jefferson continued to serve as spiritual leader of opposition to Federalism, particularly the repressive Alien and Sedition Acts. He was elected President in 1801 by the House of Representatives as a result of Madison's decision to throw the Federalist vote to him rather than to Aaron Burr. He had tied him in electoral votes. The purchase of Louisiana from France in 1803, in violation of his earlier constitutional scruples, was the most notable act of his administration. Re-elected in 1804 with 62 electoral votes to 14 for the Federalist Charles C. Pinckney, Jefferson tried unsuccessfully during his second term to keep the United States out of the Napoleonic wars in Europe, employing to this end the unpopular embargo policy.

After his retirement to Monticello in 1802 he developed his interest in education by founding the University of Virginia, watching its development with never-fading interest. He died at Monticello on July 6, 1826. Tall, loose-jointed, a poor dancer, Jefferson had an enormous variety of interests and skills, ranging from education and science to architecture and agriculture. Economically his conception of development presupposed an essentially rural

community of small freeholds; but his deep and abiding faith in the common man provides inspiration for future generations. The standard biographies are by Chinard, Bowers, Kimball, Randall, and Malone.

JAMES MADISON

James Madison was born in Port Conway, Virginia, on March 16, 1751 (March 5, 1750/1, old style). A Princeton graduate, he joined the struggle for independence on his return to Virginia in 1771. In the seventies and eighties he was active both in state politics, where he championed the Jefferson reform program, and in the Continental Congress. He was influential in the Constitutional Convention as leader of the group favoring a strong central government and as recorder of the debates; and he subsequently wrote, in collaboration with Alexander Hamilton and John Jay, the *Federalist* papers to aid the campaign for the adoption of the Constitution.

In the new Congress, Madison soon emerged as the leader in the House of the men who opposed Hamilton's financial program and his pro-British leanings in foreign policy. Retiring from Congress in 1797, he continued active in Virginia and drafted the Virginia Resolution protesting the Alien and Sedition Acts. His intimacy with Jefferson made him the natural choice for Secretary of State in 1801.

In 1809 Madison succeeded Jefferson as President, with 122 electoral votes to 47 for the Federalist, C. C. Pinckney, and 6 scattering. His attractive wife, Dolly Payne Todd, whom he married in 1794, brought a new social sparkle to the executive mansion. In the meantime, increasing tension with Britain culminated in the War of 1812—a war for which the United States was unprepared, and for which Madison lacked the executive talent to clear out incompetence and mobilize the nation's energies. Madison was re-elected in 1812, with 128 electoral votes to 89 for the Federalist, De Witt Clinton. In 1814 the British actually captured Washington and forced Madison to flee to Virginia.

In his domestic program, Madison capitulated to the Hamiltonian policies that he had resisted twenty years before, signing bills to establish a United States Bank and a higher tariff. Following his presidency, he remained in retirement in Virginia until his death on June 28, 1836. Small, wrinkled, unimpressive, Madison had an acute political intelligence but lacked executive force. The standard biographies are by Hunt, Brant, and Rives.

JAMES MONROE

James Monroe was born on April 28, 1758, in Westmoreland County, Virginia. A William and Mary graduate, he served in the army during

the first years of the Revolution and was wounded at Trenton. He then entered Virginia politics and later national politics under the sponsorship of Jefferson. In 1786 he married Eliza Kortright.

Fearing centralization, Monroe opposed the adoption of the Constitution and, as senator from Virginia, was highly critical of the Hamiltonian program. In 1794 he was appointed minister to France where his ardent sympathies with the Revolution exceeded the wishes of the State Department. A troubled diplomatic career ended with his recall in 1796. From 1799 to 1802 he was governor of Virginia. In 1803 Jefferson sent him to France to help negotiate the Louisiana Purchase and for the next few years he was active in various continental negotiations.

In 1808 Monroe flirted with the radical wing of the Republican party, which opposed Madison's candidacy; but the presidential boom came to naught and, after a brief term as governor of Virginia in 1811, Monroe accepted Madison's offer of the State Department. During the war he vainly sought a field command and served as Secretary of War from Sept., 1814, to Mar., 1815.

Elected President in 1816 with 183 electoral votes to 34 for the Federalist Rufus King, and re-elected without opposition in 1820, Monroe, the last of the Virginia dynasty, pursued the course of systematic tranquillization which won for his terms the name "the era of good feeling." He continued Madison's surrender to the Hamiltonian domestic program, signed the Missouri Compromise, acquired Florida and, with the able assistance of his Secretary of State, John Quincy Adams, promulgated the Monroe Doctrine in 1823, declaring against foreign colonization or intervention in the Americas. He died in New York City on July 4, 1831.

A sound man of medium abilities, Monroe possessed qualities of judgment rather than of leadership. The standard biographies are by Morgan, Gilman, and Styron.

JOHN QUINCY ADAMS

was born on July 11, 1767, at Braintree (now Quincy), Massachusetts, the son of John Adams. He spent his early years in Europe with his father, graduated from Harvard, and entered law practice. His anti-Jeffersonian newspaper articles won him political attention. In 1794 he became minister to the Netherlands, the first of several diplomatic posts which occupied him until his return to Boston in 1801. In 1797 he married Louisa Catherine Johnson.

In 1803 he was elected to the Senate, nominally as a Federalist, but his repeated displays of independence on such issues as the Louisiana Purchase and the embargo caused his party to compel his resignation

and ostracize him socially. In 1809 Madison rewarded him for his support of Jefferson by appointing him minister to St. Petersburg. He helped negotiate the Treaty of Ghent in 1814 and in 1815 became minister to London. In 1817 Monroe appointed him Secretary of State where he served with great distinction, gaining freedom from Spain without hostilities and placing an equal part with Monroe in formulating the Monroe Doctrine.

When no presidential candidate received a majority of electoral votes in 1824, Adams, with the support of Henry Clay, was elected by the House in 1825 over Andrew Jackson, who had the original plurality. Adams had ambitious plans of government activity to foster internal improvements and promote the arts and sciences but congressional obstructionism combined with his own unwillingness or inability to play the role of a politician meant little was accomplished. Retiring to Quincy after his defeat in 1828, he was elected to the House of Representatives in 1831 where, though nominally a Whig, he pursued as ever an independent course. He led the fight to force Congress to receive a slavery petitions and fathered the Smithsonian Institution.

Stricken on the floor of the House died on February 23, 1848. Tacit, brusque, conscientious, a rough and ready debater, Adams spared neither himself nor his enemies. His long and detailed diary gives a unique picture of the personal and politics of the times. The standard biographies are by Morse and Clark.

ANDREW JACKSON

was born on March 15, 1767, in what is now generally agreed to be Waxhaw, South Carolina. After a turbulent boyhood as an orphan and a British prisoner, he moved west to Tennessee where he soon qualified for law practice but found time for frontier pleasures as horse racing, fighting, and dueling. His marriage to Rachel Donelson Robards in 1791 was complicated by subsequent legal uncertainty about the status of her divorce. During the seventeen-nineties Jackson served in the Tennessee constitutional convention, the federal House of Representatives, the federal Senate, and the Tennessee supreme court.

After some years as a country gentleman living at the Hermitage near Nashville, Jackson in 1812 was given command of Tennessee troops sent against the Creek. He defeated the Indians at Horseshoe Bend in 1814; subsequently he became a major general and won the Battle of New Orleans over veteran British troops the year after the treaty of peace had been signed at Ghent. In 1818 General Jackson invaded Florida, captured Pensacola and had two Englishmen named Arbuthnot

ster, creating an international incident. A presidential boom began for him in 1821 and in its service he returned to the Senate (1823-25). Though he won a plurality of electoral votes in 1824, he lost the House when Clay threw his strength to Adams; he won easily in 1828 by an electoral vote of 178 to 83.

President, Jackson greatly expanded the power and prestige of the presidential office and carried through an unexampled program of domestic reform, vetoing the bill to extend the United States Bank, moving toward a hard-money currency policy and checking the program of federal land improvements. He also vindicated federal authority against South Carolina and its doctrine of nullification and against France on the question of debts. Support given his policies by the workmen of the East as well as by the farmers of the East, West, and South resulted in his triumphant re-election in 1832 over Adams by an electoral vote of 219 to 49, with Clay receiving 36 and 2 not cast.

After watching the inauguration of his picked successor, Martin Van Buren, Jackson retired to the Hermitage, where he maintained a lively interest in national affairs until his death on June 8, 1845. A dignified man with a drawn and lined face, Jackson has been endowed with the traits of a statesman and a military leader. His great contribution was to add to the presidential office and the democratic doctrines of Jefferson to the new nation created by the Industrial Revolution. The standard biographies are by Bassett, and Parton.

MARTIN VAN BUREN

Born on December 5, 1782, at Kinderhook, New York. After graduating from the common school, he became a law clerk, entered practice in 1803, and soon became prominent in state politics as state senator and attorney general. In 1821 he was elected to the United States Senate. He secured the support of his efficient political organization, known as the Albany Regency, to William H. Crawford in 1824 and Jackson in 1828. After leading the opposition to Adams' administration in the election of 1828, he served briefly as governor of New York and resigned to become Jackson's Secretary of State. He soon became on intimate personal terms with Jackson and played an important part in turning the Jacksonian program from the idealistic intentions of his original Western associates.

In 1832 Van Buren became Vice President. In 1836, President, with an electoral vote of 170 against 124 scattered among the opponents. The Panic of 1837 overruled his term. He attributed it to

the overexpansion of the credit and favored the establishment of an independent treasury as repository for the federal funds. In 1840 he established a ten-hour day on public works. Defeated by Harrison in 1840, he was the leading contender for the Democratic nomination in 1844 until he publicly opposed immediate annexation of Texas and was subsequently beaten by the Southern delegations at the Baltimore convention. This incident increased his growing misgivings about the slave power.

After working behind the scenes among the antislavery Democrats, Van Buren joined in the movement which led to the Free-Soil party and became its candidate for President in 1848. He subsequently returned to the Democratic party while continuing to object to its pro-Southern policy. He died in Kinderhook on July 24, 1862. His *Autobiography* throws valuable sidelights on the political history of the times.

Small, erect, dapper, Van Buren had a reputation for slick politicking which won him such sobriquets as the Little Magician and the Red Fox of Kinderhook; but, as his later career showed, he was capable of taking firm and unpopular stands on public issues. His wife Hannah Hoes, whom he married in 1807, died in 1819.

The standard biographies are by Shepard and Lynch.

WILLIAM HENRY HARRISON

was born in Charles City County, Virginia, on February 9, 1773. Joining the army in 1791, he was active in Indian fighting in the Northwest, became secretary of the Northwest Territory in 1798 and governor of Indiana in 1800. He married Anna Symmes in 1795. Growing discontent over white encroachments on Indian lands led to the formation of an Indian alliance under Tecumseh to resist further aggressions. In 1811 Harrison won a nominal victory over the Indians at Tippecanoe and in 1813 a more decisive one at the Battle of the Thames, where Tecumseh was killed.

After resigning from the army in 1814, Harrison had an obscure career in politics and diplomacy, ending up in twenty years as a county recorder in Ohio. Nominated for President in 1835 as a military hero whom the conservative politicians hoped to be able to control, he ran surprisingly well against Van Buren in 1836. Four years later he defeated Van Buren by an electoral vote of 234 to 60 but caught pneumonia and died in Washington a month after his inauguration, April 4, 1841. Harrison's qualities were those of a soldier rather than of a statesman or political leader. The standard biographies are by Cleaves and Goebel.

JOHN TYLER

was born in Charles City County, Virginia, on March 29, 1790. A William and Mary graduate, he entered law practice and politics, serving in the House of Representatives (1816-21) and later as governor of Virginia (1825-27), and as senator. A thorough-going strict constructionist, he supported Crawford in 1824 and Jackson in 1828 but broke with Jackson over his Bank policy and became a member of the Southern state-rights group which co-operated with the Whigs. In 1836 he resigned from the Senate rather than follow instructions from the Virginia legislature to vote for a resolution expunging censure of Jackson from the Senate record.

Elected Vice President on the Whig ticket in 1840, Tyler succeeded to the presidency on Harrison's death. His strict-constructionist views soon caused a split with the Henry Clay wing of the Whig party and a stalemate on domestic questions. Tyler's more considerable achievements were his support of the Webster-Ashburton Treaty with Britain and his success in bringing about the annexation of Texas through joint congressional resolution.

After his presidency he lived in retirement in Virginia until the outbreak of the Civil War, when he emerged briefly as chairman of a peace convention and then as delegate to the provisional Congress of the Confederacy. He died on January 18, 1862. He was married first to Letitia Christian March in 1813 and, two years after her death in 1842, to Julia Gardiner. Witty, amiable, courteous, Tyler was a Virginia gentleman whose presidency was hamstrung by the basic contradiction between his own ideas and those of the party which put him on the ticket as Vice President. The standard biographies are by Chitwood and Tyler.

JAMES KNOX POLK

was born in Mecklenburg County, North Carolina, on November 2, 1795. A graduate of the University of North Carolina, he moved west to Tennessee, was admitted to the bar and soon became prominent in state politics. In 1825 he was elected to the House of Representatives where he opposed Adams and, after 1829, became Jackson's floor leader in the fight against the Bank. In 1835 he became Speaker of the House. In 1839 he was elected governor of Tennessee but was beaten in tries for re-election in 1841 and 1843.

The supporters of Van Buren for the Democratic nomination in 1844 counted on Polk as his running mate; but, when Van Buren's stand on Texas alienated Southern support, the convention swung to Polk on the ninth ballot. He was elected over Henry Clay, the Whig candidate, by an

electoral vote of 170 to 105. Rapidly disillusioning those who thought that would not run his own administration, Polk proceeded steadily and precisely achieve four major objectives—the acquisition of California, the settlement of the Oregon question, the reduction of the national treasury, and the establishment of the independent treasury. He also enlarged the Monroe doctrine to exclude all non-American intervention in American affairs, whether desirable or not, and he forced Mexico into a war which he waged to a successful conclusion. His wife Sarah Childress, whom he married in 1824, was a woman of character and ability. Polk died in Nashville, Tennessee, on June 15, 1849.

Serious, hardworking, lacking in color, Polk has long been underrated by historians who mistakenly regarded him as a slaveholders' puppet; in fact, few presidents have so thoroughly controlled their own administration or have so ably accomplished the purposes they set for themselves. Polk's *Diary* reflects the mood and problems of his presidency. The standard biography is by McCormac.

ZACHARY TAYLOR

was born at Montebello, Orange County, Virginia, on November 24, 1784. Embarking on a military career in 1808, Taylor fought in the War of 1812, the Black Hawk War, and the Seminole War, holding in between garrison jobs on the frontier or in Washington. A brigadier general as a result of his victory over the Seminoles at Lake Okeechobee (1837), Taylor held the succession of Southwestern commands. In 1846 established a base on the Rio Grande, where his forces engaged in battles which precipitated the war with Mexico. He captured Monterrey in September 1846, and, disregarding Polk's orders to stay on the defensive, defeated Santa Anna at Buena Vista in February, 1847, ending the war in the northern provinces.

Though Taylor had never cast a vote for President, his party affiliations were Whiggish, and his availability was increased by his difficulties with Polk. He was elected President over the Democratic Lewis Cass by an electoral vote of 162 to 127. During the revival of the slavery controversy, which was to result in the Compromise of 1850, Taylor began to take an increasingly firm stand against appeasing the South; but he died in Washington on July 9, 1850, in the midst of the fight over the Compromise. He married Margaret Mackall Smith in 1810. His bluff and soldierly qualities won him the name Old Rough and Ready. During his term as President he displayed a growing insight into political questions. The standard biographies are by Hamilton and Bent and McKinley.

MILLARD FILLMORE

born at Locke, Cayuga County, New York, on January 7, 1800. A lawyer, he entered politics as an Antimason under the sponsorship of Thurlow Weed, editor of the *Whig* party, and subsequently followed him into the *Whig* party. He served in the House of Representatives (1833-35 and 1837-38) and played a leading role in writing the tariff of 1842. Defeated for governor of New York in 1844, he became compromise candidate in 1848, was put on the *Whig* ticket for Taylor as a concession to the Clay faction of the party and became President Taylor's death in 1850.

As President, Fillmore broke with Weed and William H. Seward and associated himself with the pro-Southern *Whigs*, supporting the Compromise of 1850. Defeated for *Whig* nomination in 1852, he ran for President in 1856 as candidate of the Know-Nothing party, which sought to unite the country against foreigners in the alleged hope of diverting attention from the explosive slavery issue. Fillmore opposed Lincoln during the Civil War. He died in Buffalo on March 8, 1874. He was married in 1826 to Abigail Powers, died in 1853, and in 1858 to Caroline McIntosh. Urbane, gracious, kind, and weak, Fillmore was an unimpressive President. The standard biography is by Griffiths.

FRANKLIN PIERCE

born at Hillsboro, New Hampshire, on September 23, 1804. A Bowdoin graduate and lawyer, he won rapid political advancement in the Democratic party, in part because of the prestige of his father, Governor Benjamin Pierce. By 1831 he was a member of the New Hampshire House of Representatives; from 1833 to 1837 he was in the federal House and from 1837 to 1842 in the Senate. His wife, Jane Means, whom he had married in 1834, died in Washington and the somewhat troubled life led by Pierce; and in 1842 resigning from the Senate, took up a successful law practice in Concord, New Hampshire.

During the Mexican War Pierce was a major general. Thereafter he continued to espouse antislavery tendencies within the Democratic party. As a result, he was a popular choice to break the deadlock of the Democratic convention of 1852 and was elected on the 49th ballot. Pierce won 254 electoral votes to 42 for Winthrop, the *Whig* candidate.

As President, Pierce followed a course of appeasement toward the South at home and of playing a double game in schemes of territorial expansion. The failure of both his foreign and domestic policies prevented his renomination. He died in Concord, New Hampshire, on October 8, 1869, in relative obscurity.

A kindly and courteous person, Pierce was weak, unstable, and lacking in presidential qualities. The standard biography is by Nichols.

JAMES BUCHANAN

was born near Mercersburg, Pennsylvania, on April 23, 1791. A Dickinson graduate and a lawyer, he entered Pennsylvania politics as a Federalist. With the disappearance of the Federalist party, he became a Jacksonian Democrat. He served with ability in the House (1821-31), as minister to St. Petersburg (1832-33) and in the Senate (1834-45), and in 1845 became Polk's Secretary of State. Disappointed in the presidential nomination in 1852, Buchanan became minister to Britain in 1853 where he participated with other American diplomats in Europe in drafting the expansionist Ostend Manifesto.

In 1856 Buchanan received the Democratic nomination and won the election, gaining 174 electoral votes to 114 for John C. Frémont, the Republican candidate, and 8 for Millard Fillmore, American party. The growing crisis over slavery presented Buchanan with problems he lacked the will to tackle. His appeasement of the South alienated the Stephen Douglas wing of the Democratic party without reducing Southern militancy on slavery issues. While denying the right of secession, Buchanan also denied that the federal government could do anything about it. He supported the administration during the Civil War and died in Lancaster, Pennsylvania, on June 1, 1868.

The only President to remain a bachelor throughout his term, Buchanan used his charming niece Harriet Lane as White House hostess. Legalistic, indecisive, and timorous as President, Buchanan filled his other public offices capably. The standard biography is by Curtis.

ABRAHAM LINCOLN

was born in Hardin (now Larue) County, Kentucky, on February 12, 1809. His family moved to Indiana and then to Illinois, and Lincoln gained what education he could along the way. While reading law, he worked in a store, managed a mill, surveyed, and split rails. In 1834 he went to the state legislature as a *Whig* and became the party's floor leader. For the next twenty years he remained in law practice in Springfield, except for a single term (1847-49) in Congress, where he denounced the Mexican War. In 1855 he was a candidate for senator and in 1856 he joined the new Republican party.

A leading but unsuccessful candidate for the vice-presidential nomination with Frémont, Lincoln gained national attention in 1858 when, as Republican candidate for

senator from Illinois, he engaged in a series of debates with Stephen A. Douglas, the Democratic candidate. He lost the senatorial election, but continued to prepare the way for the 1860 Republican convention and was rewarded with the presidential nomination on the third ballot. He polled 180 electoral votes, as against the 123 of his three opponents, but had only a plurality of the popular vote.

From the start, Lincoln made clear that, unlike Buchanan, he believed the national government had the power to crush the rebellion. Not an abolitionist, he held the slavery issue subordinate to that of preserving the Union but soon perceived that the war could not be brought to a successful conclusion without freeing the slaves. His administration was hampered by the incompetence of many Union generals, the inexperience of the troops, and the harassing political tactics both of the Republican Radicals, who favored a hard policy toward the South, and the Democratic Copperheads, who desired a negotiated peace. The Gettysburg Address of November 19, 1863, marks the high point in the record of American eloquence. His patient search for a winning combination finally brought Generals Ulysses S. Grant and William T. Sherman to the top; and their series of victories in 1864 dispelled the mutterings from both Radicals and Peace Democrats which at one time seemed to threaten Lincoln's re-election. He received 212 electoral votes to 21 for George B. McClellan, the Democratic candidate. His inaugural address urged leniency toward the South: "With malice toward none, with charity for all . . . let us strive on to finish the work we are in; to bind up the nation's wounds . . ." This policy aroused growing opposition on the part of the Republican Radicals, but Lincoln was shot by John Wilkes Booth at Ford's Theater, Washington, on April 14, 1865, before the matter could be put to test. He died the following day.

Lincoln's marriage to Mary Todd in 1842 was often unhappy and turbulent, in part because of his wife's pronounced instability. By his remarkable literary artistry, his essential patience and devotion, his profound sense of the importance of government by, for and of the people, by the manner of his life and of his death, Lincoln has won a unique place in the hearts of Americans. The standard biographies are by Sandburg, Herndon, Nicolay, and Hay.

ANDREW JOHNSON

was born at Raleigh, North Carolina, on December 29, 1808. Self-educated, he became a tailor in Greeneville, Tennessee, but soon went into politics, where he rose steadily. From 1843 to 1853 he served in the House of Representatives, 1853-57 as governor of Tennessee, and in 1857 was

elected Senator. Politically he was a Jeffersonian Democrat, and his specialty was the fight for a more equitable land policy. Alone among the Southern Senators he stood by the Union during the Civil War. In 1862 he became war governor of Tennessee and carried out a thankless and difficult job with great courage. Johnson came Lincoln's running mate in 1864 as result of an attempt to give the ticket a nonpartisan and nonsectional character. Succeeding to the presidency on Lincoln's death, Johnson sought to carry out his policy but without his political skill. The result was a hopeless conflict with the Radical Republicans who dominated Congress. He passed measures over Johnson's vetoes, attempted to limit the power of the judiciary concerning appointments and removals. The conflict culminated with Johnson's impeachment for attempting to remove his disloyal Secretary of War. His defiance of the Tenure of Office Act was required senatorial concurrence for his dismissals. The opposition failed by a vote to get the two-thirds necessary for conviction.

After his presidency, Johnson maintained an interest in politics and in 1875 was elected to the Senate. He died near Clark Station, Tennessee, on July 31, 1875. He married Eliza McCordle in 1827. An honest, courageous, and intelligent man, Johnson lacked the tact, patience, and self-control to be an effective President.

The standard biographies are by Folsom, Stryker, and Milton.

ULYSSES SIMPSON GRANT

was born (as Hiram Ulysses Grant) at Point Pleasant, Ohio, on April 27, 1822. He finished West Point in 1843 and served without particular distinction in the Mexican War. In 1848 he married Julia Grant. He resigned from the army in 1854, following warnings from his commanding general about his drinking habits, and for the next six years held a wide variety of jobs in the Middle West. With the outbreak of the Civil War, he sought a command soon, to his surprise, was made a brigadier general. His continuing successes in the western theaters, culminating in the capture of Vicksburg in 1863, brought him national fame and soon the command of all the Union armies. His dogged, unflinching policy of concentrating on capturing and destroying the Confederate army brought the war to an end in 1865. In 1866 he was made full general.

Grant's relations with Johnson steadily worsened; and in 1868, as the Republican candidate for President, he was elected with 214 electoral votes. At the start Grant showed his unfitness for the office. His cabinet was weak, his

policy was confused, many of his associates were corrupt. The no-achievement in foreign affairs was settlement of controversies with Great Britain in the Treaty of London (1871), stated by his able Secretary of State, on Fish.

Re-elected for a second term, he defeated Horace Greeley, the Democratic and Republican candidate, 286 votes to 214. The Panic of 1873 created difficulties for him during his second term.

Retiring from office, Grant toured the country for two years and returned in time for a third-term boom, but was defeated in the convention of 1880. Illness and business judgment darkened his later years, but he worked steadily at the *General Grant Memoirs* which were to be so successful when published after his death in 1897. He died at Saratoga, New York, on July 23, 1885. Inarticulate, tactless, unkind to his friends, he was an able general who should never have accepted the Presidency. The standard biographies are by Henshew and Woodward.

RUTHERFORD BIRCHARD HAYES

Born at Delaware, Ohio, on October 4, 1822. A graduate of Kenyon College and Harvard Law School, he practiced law in Ohio and then in Cincinnati, Ohio. He married Lucy Webb. A Whig, he joined the Republican party in 1855. During the Civil War he rose to the rank of Major General. He served in Congress from 1867 and then confirmed a reputation for honesty and efficiency in two terms as governor of Ohio. His re-election in 1875 made him the logical candidate for those Republicans who opposed James G. Blaine in 1876, and he was successfully nominated.

The result of the election was for some time in doubt and hinged upon disputed votes from South Carolina, Louisiana, and Oregon. Samuel J. Tilden, the Democratic candidate, had the larger popular vote but was adjudged by the strictly legal decisions of the Electoral Commission to have one less electoral vote, 185 to 184. The national acceptance of this result was due in part to the general unwillingness that Hayes would pursue a policy toward the South. He withdrew the troops from the South, took a moderate position on financial matters, and urged civil service reform.

He served only one term by his own choice and spent the rest of his life in various humanitarian endeavors. He died in Ohio, on January 17, 1893. A frank, conscientious, sensible man, he represented the best type of Republican of his day. The standard biography is by Eckenrode and Williams.

JAMES ABRAHAM GARFIELD,

the last President to be born in a log cabin, was born at Cuyahoga County, Ohio, on November 19, 1831. A Williams graduate, he taught school for a time and entered Republican politics in Ohio. In 1858 he married Lucretia Rudolph. During the Civil War he had a promising career, rising to the rank of major general of volunteers; but in 1863 he was elected to the House of Representatives where he served until 1880. His oratorical and parliamentary abilities soon made him the leading Republican in the House, though his record was marred by his unorthodox acceptance of a fee in the DeGolyer paving contract case and by suspicions of his complicity in the Crédit Mobilier scandal.

In 1880 Garfield was elected to the Senate, but instead became the presidential candidate on the 36th ballot as a result of a deadlock in the Republican convention. He gained 214 electoral votes to 155 for General Winfield Scott Hancock, the Democratic candidate. Garfield's administration was barely under way when he was shot by Charles J. Guiteau, a disappointed office seeker, in July. He died in Elberon, New Jersey, on September 19, 1881. An attractive and eloquent man, he was much beloved in his day.

The standard biographies are by Smith and Caldwell.

CHESTER ALAN ARTHUR

was born at Fairfield, Vermont, on October 5, 1830. A graduate of Union College, he became a successful New York lawyer. In 1859 he married Ellen Herndon. During the Civil War he held administrative jobs in the Republican state administration and in 1871 was appointed collector of the Port of New York by Grant. This post gave him control over considerable patronage; and, though not personally corrupt, Arthur managed his power in the interests of the New York machine so openly that President Hayes in 1877 called for an investigation, and in 1878 Arthur was suspended from his responsibilities.

In 1880 Arthur was nominated for Vice President in the hope of conciliating the followers of Grant and the powerful New York machine. As President on Garfield's assassination, Arthur, stepping out of his familiar role as spoilsman, backed civil service reform, reorganized the cabinet and prosecuted political associates accused of post office graft. Losing machine support and failing to gain the reformers, he was not renominated. He died in New York City on November 18, 1886. A tall, handsome, dignified man with real administrative abilities, he was a better President than his previous record promised. The standard biography is by Howe.

STEPHEN GROVER CLEVELAND

was born at Caldwell, New Jersey, on March 18, 1837. He was admitted to the bar in Buffalo, New York, in 1859 and lived there as a lawyer, with occasional incursions into Democratic politics, for more than twenty years. He did not participate in the Civil War. As mayor of Buffalo in 1881, he carried through a reform program so ably that the Democrats ran him successfully for governor in 1882. In 1884 he won the Democratic nomination for President. The campaign contrasted Cleveland's spotless public career with the uncertain record of James G. Blaine, the Republican candidate, and Cleveland received enough Mugwump (Independent Republican) support to win by 219 to 182 electoral votes.

As President, Cleveland pushed civil service reform, opposed the pension grab and attacked the high tariff rates. While in the White House he married Frances Folsom (1886). Renominated in 1888, Cleveland was defeated by Benjamin Harrison, polling more popular but fewer electoral votes. In 1892 he was re-elected over Harrison, 277 to 145, with 22 votes for James B. Weaver, the Populist candidate. When the Panic of 1893 burst upon the country, Cleveland's attempts to solve it by sound-money measures alienated the free-silver wing of the party, while his tariff policy alienated the protectionists. In 1894 he sent troops to break the Pullman strike. In foreign affairs his firmness caused Great Britain to back down in the Venezuela border dispute.

In his last years Cleveland was an active and much respected public figure. He died in Princeton, New Jersey, on June 24, 1908. An honest, stubborn, high-principled man, Cleveland was an old-fashioned liberal in the nineteenth-century sense who was baffled by the new problems of industrial society. The standard biographies are by Nevins and McElroy.

BENJAMIN HARRISON

was born in North Bend, Ohio, on August 20, 1833, the grandson of William Henry Harrison. A graduate of Miami University, he took up the law in Indiana and became active in Republican politics. In 1853 he married Caroline Lavina Scott. During the Civil War he rose to the rank of brigadier general. A sound-money Republican, he was elected senator from Indiana in 1880 and in 1888 received the Republican nomination for President on the 8th ballot. Though behind on the popular vote, he won over Grover Cleveland in the electoral college by 233 to 168.

As President, Benjamin Harrison failed to please either the bosses or the reform element in the party. In foreign affairs he backed Secretary of State Blaine, whose policy foreshadowed later American im-

perialism. In 1892 Harrison was renominated, but Cleveland beat him in the election. His wife died in the White House in 1892, and Harrison married her niece, Ida Scott (Lord) Dimmick, in 1896. After presidency, he resumed law practice and died in Indianapolis, Indiana, on March 13, 1901. Harrison was an honest man of very medium abilities.

WILLIAM MCKINLEY

was born in Niles, Ohio, on January 30, 1843. He taught school, then served in the Civil War, rising from the ranks to become a major. Subsequently he opened a law office in Canton, Ohio, and in 1870 married Ida Saxton. Elected to Congress in 1876, he served there steadily till 1891, except for 1883-85. His faithful advocacy of business interests culminated in passage of the highly protective McKinley Tariff of 1890. With the support of Hanna, a shrewd Cleveland business ally, interested in safeguarding tariff protection, McKinley became governor of Ohio in 1892 and Republican presidential candidate in 1896. The business community, alarmed by the progressivism of William Jennings Bryan, the Democratic candidate, contributed considerable money to assure McKinley's victory, which was by the margin of 270 to 176 in the electoral college.

The chief event of McKinley's administration was the war with Spain, which resulted in our acquisition of the Philippines and other islands. With imperialism as an issue, McKinley defeated Bryan in the election of 1900 by 292 to 155. On September 6, 1901, he was shot at Buffalo by Leon F. Czolgosz, an anarchist, and died there on September 14.

The standard biography is by Olcott.

THEODORE ROOSEVELT

was born in New York City on October 27, 1858. A Harvard graduate, he was interested in ranching, in politics, and in writing picturesque historical narratives. He was a Republican member of the New York Assembly in 1882-84, an unsuccessful candidate for mayor of New York in 1890, a U. S. Civil Service Commissioner in 1891, Police Commissioner of New York City in 1895, and Assistant Secretary of the Navy under McKinley in 1897. exuding a belligerence which helped him on the war with Spain, he resigned to help organize a volunteer regiment named the Rough Riders and take a direct part in the war. Always publicly shrewd, he won the New York gubernatorial nomination in 1898 in spite of pronounced lack of enthusiasm on the part of the bosses.

After two years of T.R. in Albany New York bosses succeeded in getting him the vice-presidential nomination in

velt accepted it with reluctance, feeling that his career had been ruined. As president on McKinley's assassination, he revived the new popular mood of progressivism and initiated a policy of trust-busting, designed to control giant corporations. He also strengthened government control over interstate commerce and launched a conservation program to save natural resources. In foreign affairs he pursued a truculent policy, permitting the suppression of a revolt in Panamá to dissuade Colombian objections to the Panama Canal and helping to maintain the balance of power in the East by bringing the Russo-Japanese war to an end. In 1904 he decisively defeated Alton B. Parker, his conservative Democratic opponent, by an electoral margin of 336 to

winning his second term he went big game hunting in Africa and toured Europe. His return to the United States, his increasing coldness toward Taft led him to disavow his earlier disclaimer of third-party ambitions and to re-enter politics. Defeated by the machine in the Republican convention of 1912, he organized the Progressive party and polled more votes than Taft, though the split brought about the election of Wilson. From 1915 on, Roosevelt strongly favored intervention in European war. He became deeply embittered at Wilson's refusal to allow him to lead a volunteer division. He died in New York, New York, on January 6, 1919. He was married twice: in 1880 to Alice Lee, who died in 1884; and in 1887 to Edith Kermit Carow.

Roosevelt, an athletic advocate of the strenuous life, with his high voice, prominent teeth, and thick glasses, captured the imagination of the American people. He was one of the great personalities of American history. The standard biography is by

WILLIAM HOWARD TAFT

born in Cincinnati, Ohio, on September 15, 1857. A Yale graduate, he entered Republican politics in the eighteen sixties. In 1886 he married Helen Herron. From 1887 to 1890, he served on the Ohio supreme court; 1890-92, as solicitor general of the United States; 1892-1900, on the federal circuit court. In 1900 McKinley appointed him president of the Philippine Commission and in 1901 governor general. He had great success in pacifying the Philippines, solving the problem of the Hawaiian Islands, improving economic conditions and establishing limited self-government. He served as Secretary of War 1904-1908, and demonstrated his capacity as mediator and conciliator; and he was McKinley's hand-picked successor in 1908.

In the election he polled 321 electoral votes to 162 for William Jennings Bryan.

As President, though he carried on many of Roosevelt's policies, Taft got into increasing trouble with the progressive wing of the party and displayed mounting irritability and indecision. After his defeat in 1912, he became professor of constitutional law at Yale. In 1921 he was appointed Chief Justice of the United States. He died in Washington on March 8, 1930. Enormously large, deliberate, and good-humored, Taft excelled as an administrator and judge, not as a political leader.

The standard biography is by Pringle.

THOMAS WOODROW WILSON

was born in Staunton, Virginia, on December 28, 1856. A Princeton graduate, he turned from law practice to post-graduate work in political science at Johns Hopkins University, receiving his Ph.D. in 1886. He taught at Bryn Mawr, Wesleyan, and Princeton, and in 1902 was made president of Princeton. After an unsuccessful attempt to democratize the social life of Princeton, he welcomed an invitation in 1910 to be the Democratic gubernatorial candidate in New Jersey. His success in fighting the machine and putting through a reform program attracted national attention.

In 1912, after a protracted contest at Baltimore, Wilson won the Democratic nomination on the 46th ballot. In the election he received 435 electoral votes to 88 for Roosevelt and 8 for Taft. During his first term Wilson proceeded under the standard of the New Freedom to enact a program of domestic reform, including the Federal Reserve Act, the Clayton Anti-trust Act, the establishment of the Federal Trade Commission, and other measures designed to restore competition in the face of the great monopolies. In foreign affairs, while privately sympathetic with the Allies, he strove to maintain strict neutrality in the European war and warned both sides against encroachments on American interests.

Re-elected in 1916 as a peace candidate, he tried to mediate between the warring nations; but, when the Germans resumed unrestricted submarine warfare in 1917, Wilson brought the United States into what he now believed was a war to make the world safe for democracy. He supplied the classic formulations of Allied war aims; and the armistice of November, 1918, was negotiated on the basis of Wilson's Fourteen Points. In 1919 he strove at Versailles to lay the foundations for enduring peace. He accepted the imperfections of the Versailles Treaty in the expectation that they could be remedied by action within the

League of Nations. He probably could have secured ratification of the treaty if he had adopted a more conciliatory attitude toward the mild reservationists; but his insistence on all or nothing eventually caused the diehard isolationists and diehard Wilsonites to unite in rejecting a compromise.

In September, 1919, Wilson suffered a paralytic stroke which limited his future activity. After the presidency he lived on in retirement in Washington, dying February 3, 1924. He was married twice—in 1885 to Ellen Louise Axson, who died in 1914, and in 1915 to Edith Bolling Galt. A man of high principle, inspiring eloquence, and great intellectual ability, Wilson was the first leader to fire the imagination of the masses of the world with the vision of world peace. The standard biography is by Baker.

WARREN GAMALIEL HARDING

was born in Morrow County, Ohio, on November 2, 1865. After attending Ohio Central College, Harding became interested in journalism and in 1884 bought the *Marion* (Ohio) *Star*. In 1891 he married a wealthy widow, Florence Kling De Wolfe. As his paper prospered, he entered Republican politics, serving as state senator (1899–1903), and as lieutenant governor (1904–06). In 1910 he was defeated for governor but in 1914 was elected to the Senate. His reputation as orator made him keynoter in the 1916 convention.

When the 1920 Republican convention was deadlocked between Leonard Wood and Frank O. Lowden, Harding was made the dark-horse nominee on his solemn affirmation that there was no reason in his past that he should not be. Straddling the League question, Harding was elected easily, with 404 electoral votes to 127 for James M. Cox, his Democratic opponent. His cabinet contained some able men, but also some manifestly unfit for public office. Harding's own intimates were mediocre when they were not corrupt. The impending disclosure of scandals in the Interior and Justice departments and in the Veterans' Bureau, as well as political setbacks, profoundly worried him. On his return from Alaska in 1923, he died suddenly at San Francisco on August 2. A handsome and genial man, indiscriminating in his associates, lacking in political ideas or fortitude, Harding was totally unfit for the presidency.

JOHN CALVIN COOLIDGE

was born in Plymouth, Vermont, on July 4, 1872. An Amherst graduate, he went into law practice at Northampton, Massachusetts, in 1897. He married Grace Anna Goodhue in 1905. He entered Republican

state politics, becoming successively mayor of Northampton, state senator, lieutenant governor and, in 1919, governor. His conduct in regard to the Boston police strike in 1919 won him a somewhat undesired reputation for decisive action and brought him the Republican vice-presidential nomination in 1920. After Harding's death Coolidge handled the Washington scandal with care and finally managed to save the Republican party from public blame and the widespread corruption.

In 1924 Coolidge won re-election with difficulty, getting 382 electoral votes, 136 for the Democrat, John W. Davis, 13 for Robert M. La Follette running on Progressive ticket. His second term, like first, was characterized by a general satisfaction with the existing economic order. He stated that he did not choose to retire in 1928.

After his presidency, Coolidge lived quietly in Northampton, writing an illuminating *Autobiography* and conducting a syndicated column. He died in Northampton, Massachusetts, on January 5, 1933. His dry, Yankee humor, his frugality, glumness made him a paradoxically popular President in the boom period. Standard biographies are by White Fuess.

HERBERT CLARK HOOVER

was born at West Branch, Iowa, on August 10, 1874. A Stanford graduate, he worked from 1895 to 1913 as a mining engineer and consultant in North America, Europe, Asia, Africa, and Australia. In 1899 he married Lou Henry. During the First World War he served with distinction as chairman of the American Relief Committee in London, as chairman of the Commission for Relief in Belgium and as United States Food Administrator. His political affiliations were still sufficiently indeterminate for him to be mentioned as a possible candidate for both Republican and Democratic nominations in 1920; but after the election served both Harding and Coolidge as secretary of Commerce.

In the election of 1928 Hoover received 444 electoral votes to 87 for Alfred E. Smith, the Democratic candidate. He faced the worst depression in the nation's history; but his attacks upon it were hampered by his devotion to the theory that the forces which brought the depression would soon bring the revival, and that his belief that in too many areas the federal government had no power to act. In a succession of vetoes he struck down measures proposing a national employment system or national relief; he reduced income tax rates; and only at the end of his term did he yield to popular pressure to set up agencies such as the Reconstruction Finance Corporation to make emergency loans to assist business.

his 1932 defeat, Hoover returned to business. In 1946, President Truman charged him with various world food tasks; and from 1947 to 1949 and again in 1953 to 1955, he was head of the Commission on Organization of the Executive Branch of the Government.

FRANKLIN DELANO ROOSEVELT

Roosevelt was born in Hyde Park, New York, on Jan. 30, 1882. A Harvard graduate, he attended Columbia Law School and was admitted to the New York bar. In 1910 he was elected to the New York state senate as Democrat. Re-elected in 1912, he was named Assistant Secretary of the Navy under Woodrow Wilson in 1913. In 1920 his personality and his war services helped him in his nomination for Vice President. James M. Cox's running mate. On his defeat, he returned to law practice in New York. In August, 1921, Roosevelt was stricken with infantile paralysis at Campobello, New Brunswick. After a long and gallant fight against the disease, he recovered partial use of his legs. In 1928 and 1929 he led the fight at the Democratic national conventions for the nomination of Governor Alfred E. Smith of New York; and in 1928 Roosevelt was induced to run for governor of New York. He was elected and was re-elected in 1930.

In 1932 Roosevelt received the Democratic nomination for President and immediately launched a campaign which gave a new spirit to a weary and disheartened nation. He won the election over Hoover by a margin of 472 to 59 electoral college. His first term was characterized by an unfolding of the New Deal program, with greater benefits for the farmers, and the unemployed, and a progressive estrangement of most of the business community.

Early in his stage Roosevelt became aware of the menace to world peace involved in the existence of totalitarian fascism, and in 1937 on he tried to focus public attention on the trend of events in Europe. As a result he was widely denounced as a warmonger. He was re-elected over Alfred M. Landon by the slim electoral margin of 523 to 35 in the gathering international crisis. He decided to decide to run again in 1940. He defeated Wendell L. Willkie by a vote of 337 to 167.

Roosevelt's program to bring maximum production in Britain and, after June, 1941, to the United States was opposed, until the Japanese attack on Pearl Harbor restored national unity. During the war Roosevelt shelved the New Deal in the interests of conciliating the business community, both in order to get full production during the war and to prepare the way for a united

acceptance of the peace settlements after the war. A series of conferences with Winston Churchill and Joseph Stalin laid down the bases for the postwar world. In 1944 he was elected to a fourth term, running against Governor Thomas E. Dewey of New York.

On April 12, 1945, Roosevelt died at Warm Springs, Georgia, shortly after his return from the Yalta Conference. His wife, Anna Eleanor Roosevelt, whom he married in 1905, is a woman of great ability who made significant contributions to her husband's policies. No President has been faced with so many staggering responsibilities, both at home and abroad.

HARRY S. TRUMAN

Truman was born on a farm near Lamar, Missouri, on May 8, 1884. During the First World War he served in France with the 129th Field Artillery. He married Bess Wallace in 1919. After engaging briefly and unsuccessfully in the haberdashery business in Kansas City, Truman entered local politics. Under the sponsorship of Thomas Pendergast, Democratic boss of Missouri, he held a number of local offices, preserving his personal honesty in the midst of a notoriously corrupt political machine. In 1934 he was elected to the Senate and was re-elected in 1940. During his first term he was a loyal but quiet supporter of the New Deal; but in the course of his second term, an appointment as head of a Senate committee to investigate war production brought out his special qualities of honesty, common sense, and hard work, and he won widespread respect.

Elected Vice President in 1944, Truman became President upon Roosevelt's death in 1945 and immediately had to face complex postwar problems, both domestic and foreign. His first attempts did not meet with marked success, and the Republicans won control of Congress in 1946. The next two years were distinguished by the Truman Doctrine, the Marshall Plan, and civil rights proposals; and his general record, highlighted by a vigorous Fair Deal campaign, brought about his unexpected and impressive re-election in 1948.

Truman's second term was primarily concerned with the Cold War with the Soviet Union, the implementing of the North Atlantic Pact, the United Nations police action in Korea, and the vast rearmament program with its accompanying problems of economic stabilization.

On Mar. 29, 1952, Truman announced that he would not run again for the Presidency. He campaigned actively for Adlai E. Stevenson. After Eisenhower's inauguration, Truman returned to his Independence, Missouri, home to write his memoirs. He further busied himself with the organization of the Harry S. Truman Library in Independence, Missouri.

DWIGHT DAVID EISENHOWER

was born in Denison, Texas, on October 14, 1890. His ancestors lived in Germany, and emigrated to America, settling in Pennsylvania, early in the 18th century. His father, David, had a general store in Hope, Kansas, which failed. After a brief time in Texas, the family moved to Abilene, Kansas.

After graduating from Abilene High School in 1909, Dwight Eisenhower did odd jobs for almost two years. He won an appointment to the Naval Academy at Annapolis, but it turned out that he was too old for admittance. Then he received an appointment in 1910 to West Point. He was graduated a 2nd lieutenant in 1915.

He did not see service in World War I, having been assigned to the 19th Infantry at Fort Sam Houston, Texas. There he met Mamie Geneva Doud, whom he married in Denver on July 1, 1916. Their first son died in infancy. Their second son is Major John Sheldon Doud Eisenhower.

A paper he wrote about 1930 attracted the attention of General Douglas MacArthur, then Chief of Staff, who asked that Eisenhower be assigned to his office. When MacArthur went to the Philippines as military adviser in 1935, Eisenhower accompanied him and remained with him until 1939.

General George C. Marshall brought him into the War Department General Staff and, in 1942, put him in command of the

Allied invasion of North Africa. In 1945 Eisenhower was made Supreme Allied Commander of the invasion of Europe.

After the war, Eisenhower served Army Chief of Staff from November, 1945, until February, 1948, when he was appointed president of Columbia University.

In December, 1950, President Truman called Eisenhower to active duty to command the North Atlantic Treaty Organization forces in Europe. He held this post until the end of May, 1952.

In the Republican Convention of 1952, in Chicago, Eisenhower won the Presidential nomination on the first ballot in a close race with Senator Robert A. Taft of Ohio. In November, he won the election, defeating Adlai E. Stevenson by an electoral vote of 442 to 89.

Eisenhower's Administration from 1953 to the fall of 1958 was marked by alternating periods of tension and relaxation in foreign affairs. On the home front, following a middle-of-the-road line, he made little to abandon the social policies of the New Deal-Fair Deal, but he sought to increase state participation and the assumption of a larger responsibility by business for investment and employment. His illness in Sept., 1955, and June, 1956, raised the question of his availability for a second term. He announced his candidacy on Nov. 10, and was renominated. He was re-elected by a total of 457 electoral votes to 7 for Adlai E. Stevenson.

Note: For President Eisenhower's second administration see Headline Stories in front of book *Headline History* for 1957 and 1958 and News Items for 1959.

How to Number the Presidents

Did Eisenhower take office as the 33rd President or as the 34th?

The difficulty started with Grover Cleveland. He became our 22nd President back in 1885. Then came Benjamin Harrison, who was obviously the 23rd President, serving from 1889-93. At this point, Cleveland returned to the White House for a second (but nonconsecutive) term.

Cleveland was still the same man who had been our 22nd President. But in his later term, it would look silly—some folks thought—to continue to call him our 22nd President. That would make the 22nd President follow the 23rd. Numbers should go in order—so ran the argument—and Cleveland should therefore be designated both as the 22nd President in his first term and as the 24th in his second term.

The people who argued the other way found an eloquent spokesman in John Kieran. He said: "Write down the names of all the Presidents, and you will only get 33. If you write Cleveland twice, you'll get 34—but in that case you've got

to write Franklin D. Roosevelt's name four times. Until they prove to me that Grover Cleveland was two men, Eisenhower can't be the 34th President."

The *Congressional Directory*, which has been considered the official final authority, has grappled with the problem of numbering the Presidents. Until recent years, it followed John Kieran's theory.

After the election of President Truman in 1948 and before the election of President Eisenhower, the *Congressional Directory* changed its official mind. In the 1956 *Congressional Directory*, Truman is listed as the 33rd President, and Eisenhower is listed as the 34th. (Cleveland has two numbers—22nd and 24th.)

Since 1957, the *Directory* has listed the Presidents without numbering them, and we don't know why. Although we are listing the Presidents on the basis of the *Congressional Directory* of 1956 we can't think of John Kieran's remark about the busts of all the Presidents in the White House and count them and you will get 33, not only 33."

THE UNITED STATES ARMED SERVICES

U. S. MILITARY ACADEMY

Source: U. S. Military Academy.

Established in 1802 by an Act of Congress, the U. S. Military Academy is located on the west bank of the Hudson River some 25 miles north of New York City. Admission may be gained only by appointment to one of the 2,512 cadetships authorized by Congress. These cadetships are allocated among the following sources of nomination:

Competitive:	
Representatives (4 each)	1,748
Senators (4 each)	400
President:	
Presidential	3
District of Columbia	6
Insular Zone Government ...	2
Puerto Rico	4
Total	15
Competitive:	
Army and Air Force:	
Regular components	90
Reserve components	90
Total	180
Naval:	
Sons of deceased veterans	40
Sons of military & honor naval officers	40
Total	80
Total	2,512

Approximately 750 of these cadetships vacant annually are available to new candidates annually. Candidates may be nominated for these vacancies during the year preceding the admission date—the first Tuesday in July.

Candidates must be citizens of the U. S., of good moral character, have never been married, be between the ages of 17 and 22, have completed secondary-school education or its equivalent, and be able to meet the physical, medical, and physical aptitude requirements. Mental qualification is determined by an analysis of entire scholastic record and performance on prescribed tests of the College Entrance Examination Board. The College Board tests which have been prescribed by the Military Academy are—The Scholastic Aptitude Test and Achievement Test, English Composition and Mathematics. The particular College Board tests which a candidate must take to qualify for admission to the Military Academy depend on whether the candidate's nomination is competitive or non-competitive. A non-competitive candidate with an excellent college record of at least one semester at an accredited college may qualify for admission by passing only the College Board Scholastic Aptitude Test. The requirements and procedures for admission are described in the U. S. Military Academy Catalogue, available without charge from The Registrar, U. S. Military Academy, West Point, N. Y.

Cadets receive their entire education at Government expense and are paid \$111.15 per month. From this sum, they pay for their uniforms, textbooks, etc. Upon successful completion of the 4-year course, the graduate receives the degree of Bachelor of Science and is commissioned a second lieutenant in the Regular Army.

U. S. NAVAL ACADEMY

Source: U. S. Naval Academy.

On October 10, 1845, the Naval School was established at Fort Severn, Annapolis, Maryland. Five years later it was renamed the United States Naval Academy, and the following year a regular four-year course was adopted. In June, 1959, the academic departments were grouped under three directors as follows: Director of Naval Science (Command—Weapons—Naval Hygiene); Director of Science and Engineering (Mathematics—Science—Engineering); and Director of Social Sciences and Humanities (English, History, and Government—Foreign Languages). The Executive Department and Physical Education came under the direction of the Commandant of Midshipmen.

Candidates are selected as follows:

- 5 from the District of Columbia.
- 40 sons of men and women killed in action or who have died, or may hereafter die of wounds or injuries, or disease contracted, in active service in World Wars I and II and other periods.
- 75 annually from among sons of officers and enlisted men in the regular Army, Navy, Marine Corps, Air Force and Coast Guard.
- 160 enlisted Navy and Marine personnel selected annually by competitive examination.
- 160 annually chosen by the Secretary of the Navy from the Naval and Marine Corps Reserves.
- 5 Puerto Ricans chosen by the Resident Commissioner of Puerto Rico.
- 1 on the recommendation of the Governor of Puerto Rico.
- 4 Filipinos designated by the President of the United States.
- 1 from the Canal Zone.
- 20 annually from schools designated by the Army and Navy as honor schools and from NROTC schools.
- 20 from the American republics and the Dominion of Canada.
- Unlimited: Sons of persons who have been or shall hereafter be awarded the Medal of Honor.

Each Senator and Representative in Congress, and the Vice President may have not more than 5 Midshipmen at the Naval Academy. The Board of Commissioners selects the 5 from the District of Columbia. The President selects the 40 sons of de-

ceased veterans of World Wars and the 75 sons of officers and enlisted men in the regular Army, Navy, Marine Corps, Air Force and Coast Guard. The President also appoints the sons of holders of the Medal of Honor.

Subject to the existence of vacancies and the availability of accommodations, the Secretary of the Navy may nominate for appointment a limited number of additional candidates. These must be recommended by the Academic Board from among the fully qualified, regularly nominated alternate and competitive candidates of the same year who were unable to enter because of the appointment of men preceding them in nomination.

Candidates for admission must be between 17 and 22 years of age on July 1 of their entering year. They may qualify by submitting acceptable scores on College Entrance Examination Board aptitude and achievement tests, or by presenting acceptable high school and college certificates. Details of the entrance requirements, scholastic and physical, may be obtained from the Naval Academy or from the Navy Department, Washington, 25, D.C. Candidates must also meet physical requirements and be unmarried.

Midshipmen are paid \$111.15 per month. Graduates of the Academy are granted Bachelor of Science degrees and are commissioned as ensigns in the Navy or second lieutenants in the Marine Corps.

U. S. COAST GUARD ACADEMY

Source: U. S. Coast Guard Academy.

The cadet system of the Coast Guard was established by law on July 31, 1876, when the "School of Instruction" for the Revenue Cutter Service, predecessor to the Coast Guard, was authorized.

The *J. C. Dobbin*, a converted schooner, served as the first schoolship, and was succeeded in 1878 by the bark *Chase*, a ship built for cadet training. First winter quarters were in a sail loft at New Bedford, Mass. The school was moved in 1900 to a two-story frame school at Curtis Bay, Md., to provide a more technical education; and in 1910 to Fort Trumbull, New London, Conn. In 1932 the Academy moved to its present site in the latter city.

The 4-year college-level curriculum leads to a Bachelor of Science degree and to a commission of ensign in the U. S. Coast Guard.

Cadets receive appointment to the Academy through a nation-wide competitive examination, held annually in February. Candidates must be between 17 and 22 years of age, physically sound, unmarried and at least 5' 4" tall. They must agree to remain unmarried until graduation and to serve at least 4 years on active duty. Cadets receive \$1,333.80 per year to cover their uniform and incidental expenses, and are

furnished their rations and quarters. Applications for appointment may be made to the Commandant (PTP), U. S. Coast Guard, Washington 25, D. C.

U. S. MERCHANT MARINE ACADEMY

Source: U. S. Merchant Marine Academy.

The U. S. Merchant Marine Cadet College was established Mar. 15, 1938, and the Academy is located on the south shore of Long Island Sound at Kings Point, N. Y.

The Academy has a complement of 1,200 cadets representing every U. S. state, District of Columbia, the Canal Zone, Puerto Rico, Guam, American Samoa and the Virgin Islands. In addition, it is authorized to admit 12 candidates from Central and South American republics.

Competitive examinations are held annually among candidates nominated by Senators and members of the House of Representatives. Appointments to the Academy are governed by a state and territory quota system based on population. A candidate must be an unmarried citizen not less than 17 and not yet 22 years of age by July 1 of the year in which admission is sought. He must have 15 school credits, including 3 units in mathematics (from algebra, geometry and trigonometry), 1 unit in science (physics or chemistry) and 3 in English.

The course is 4 years, consisting of 1 year as Fourth Classman at the Academy, 1 year as Third Classman aboard a merchant ship, and 2 years as Second and First Classman at the Academy. Study includes marine engineering, navigation, electricity, ship construction, naval science and tactics, economics, business, languages, history, and other subjects.

On completion of their courses, cadets are examined for their original Merchant Marine license as deck or engineer officer in any ship in the U. S. Merchant Marine. They also receive Bachelor of Science degrees and may be commissioned as ensigns in the U. S. Naval Reserve.

U. S. AIR FORCE ACADEMY

Source: U. S. Air Force Academy.

The bill establishing the Air Force Academy was signed by President Eisenhower Apr. 1, 1954. The first class of 306 cadets was sworn in on July 11, 1955, at the Air Force Base, Denver, Colo., the Academy's temporary location. The Academy moved into the Academy's permanent home north of Colorado Springs in Aug. 1955.

Eventually the Academy will have a complement of over 2,500. Qualified graduates of Medal of Honor winners will be admitted without regard to total vacancies provided they pass minimum requirements.

Candidates must be citizens of the United States, be at least 17 but less than 22 on July 1

for which they seek admission, have been married, be at least 5' 4" more than 6' 6" tall, and be able the mental and physical requirements. A candidate is required to take following examinations and tests: (1) the Air Force Academy Medical Examination; (2) the Air Force Officer Qualification Test; (3) the College Entrance Examination Board Tests; and (4) a physical examination.

Cadets receive their entire education at Government expense and, in addition, are paid \$111.15 per month. From this sum, they pay for some of their uniforms, textbooks, etc. Upon completion of the 4-year course, leading to a bachelor's degree, a cadet who meets the physical qualifications is appointed a second lieutenant in the regular U. S. Air Force. Many go on to full-scale pilot training.

History of the Armed Services

Source: U. S. Department of Defense.

U. S. ARMY

Gen. Washington, on July 3, 1775, in command of the colonial militia (1000 men) besieging Boston, the first marked the union of the forces of the separate colonies under one head. The U. S. Army was born. In Jan. 1776, the Continental Congress decided that the colonies should be separate in organization from those of local communities. It established them as the U. S. Regular Army. When these forces were disbanded in 1781, only some 80 officers and men were retained to guard U. S. Army property. From this humble beginning, in the years, the strength of the U. S. Army grew or fell according to national and international conditions.

U. S. NAVY

In June and Oct. 1775, Gen. Washington gained 5 schooners and a sloop and men from his army for use of preying on inbound English vessels and thereby caused the birth of the U. S. Navy. In Dec. 1775, the Continental Congress expanded this by authorizing the construction of naval craft (one for each colony) which were completed until 1794 when further ships were provided for by act of Congress. Upon completion of these ships, the Navy Department was established as the controlling agency, and the Secretary given Cabinet rank.

U. S. AIR FORCE

Creation of the National Military Aeronautics Administration in September 1917, which placed all military aviation services under one department, was a part of the U. S. Army. Aeronautical operations of the Signal Corps from 1907 to 1917. The U. S. Air Service was established in 1918. In 1926, the U. S. Air Corps came into being and remained until 1942, when the U. S. Air Force succeeded it as the

In the Navy, ship-based fighters and bombers are attached to the several fleets and are under the orders of the fleet commanders. Marine Corps aviation comes under control of the Navy.

In 1947, the U. S. Air Force was established as an independent military service under the National Military Establishment. At that time, the name U. S. Air Corps and the names of the services within the Army Air Forces were abolished.

U. S. COAST GUARD

Our country's oldest continuous seagoing service, the U. S. Coast Guard traces its history back to 1790 when the First Congress authorized the construction of ten vessels for the collection of revenue. Known first as the Revenue Marine, and later as the Revenue Cutter Service, the Coast Guard received its present name in 1915 under an act of Congress combining the Revenue Cutter Service with the Life-Saving Service. In 1939, the Lighthouse Service of the Department of Commerce was also consolidated with this unit. The Bureau of Marine Inspection and Navigation was transferred temporarily to the Coast Guard in 1942, permanently in 1946. Through its antecedents, the Coast Guard is one of the oldest organizations under the Federal government and, until the Navy Department was established in 1798, served as the only U. S. armed force afloat. In time of peace it operates under the Treasury Department, serving as the Nation's primary agency for promoting marine safety and enforcing Federal maritime laws. In time of war, or on direction of the President, it is attached to the Navy Department.

U. S. MARINE CORPS

Founded in 1775 and observing its official birthday on Nov. 10, the U. S. Marine Corps was developed to be able to serve to advantage on land or sea.

It has been used successfully in every U. S. war beginning with the Revolution, when it consisted of 2 battalions. It reached its high in achievement in World War II and in the Korean conflict when over 75% of its officers and men saw combat.

Selective Service Classifications

- I-A:** Available for military service.
I-A-O: Conscientious objector available for noncombatant military service only.
I-C: Member of Armed Forces, Coast and Geodetic Survey or Public Health Service.
I-D: Member of reserve component or student taking military training.
I-O: Conscientious objector available for civilian work contributing to maintenance of national health, safety or interest.
I-S: Student deferred by statute.
I-W: Conscientious objector performing civilian work contributing to maintenance of national health, safety or interest.
II-A: Registrant deferred because of civilian occupation (except agriculture and activity in study).

- II-C:** Registrant deferred because of agricultural occupation.
II-S: Registrant deferred because of activity in study.
III-A: Registrant with child or children registrant deferred by reason of extreme hardship to dependents.
IV-A: Registrant who has completed a sole surviving son.
IV-B: Official deferred by law.
IV-C: Alien.
IV-D: Minister of religion or divinity student.
IV-F: Physically, mentally or morally unfit.
V-A: Registrant over age of liability for military service.

Highest Ranking Officers in the Armed Forces

ARMY

Generals of the Army: Douglas MacArthur; Omar N. Bradley.
Generals: Lyman L. Lemnitzer; Isaac D. White; Williston B. Palmer; George H. Decker; Bruce C. Clarke; Clyde D. Eddleman; Clark L. Ruffner; Charles D. Palmer; Carter B. Magruder; James E. Moore.

AIR FORCE

Generals: Thomas D. White; Lauris Norstad; Curtis E. LeMay; Laurence S. Kuter; Leon W. Johnson; Thomas S. Power; Frank F. Everest; Samuel E. Anderson; Charles P. Cabell; Emmett O'Donnell, Jr.; Frederic H. Smith, Jr.

NAVY

Fleet Admiral: Chester W. Nimitz.
Admirals: Arleigh A. Burke; Harry D. James S. Russell; Charles R. Brown; R. L. Dennison; Harold P. Smith; John Sides.

MARINE CORPS

General: David M. Shoup.
Lieutenant Generals: Joseph C. Burger; Edwin W. Snedeker; Thomas A. Wornham; C. Munn; Wallace M. Greene, Jr.

COAST GUARD

Vice Admiral: Alfred C. Richmond, Commandant.
Rear Admiral: James A. Hirschfield, Assistant Commandant.

U. S. Military Actions Other Than Declared Wars

HAWAII (1893): U. S. Marines, ordered to land by U. S. Minister Stevens, aided the revolutionary Committee of Safety in overthrowing the native government. Stevens then proclaimed Hawaii a U. S. protectorate. Annexation, resisted by the Democratic regime in Washington, was not formally accomplished until 1898.

CHINA (1900): Boxers (a group of Chinese revolutionists) occupied Peking and laid siege to foreign legations. U. S. troops joined an international expedition which relieved the city.

PANAMÁ (1903): After Colombia had rejected a proposed agreement for relinquishing sovereignty over the Panama Canal Zone, revolution broke out, aided by promoters of the Panama Canal Co. Two U. S. warships were standing by to protect American privileges. The U. S. recognized the Republic of Panamá on Nov. 6.

DOMINICAN REPUBLIC (1904): When the Dominican Republic failed to meet debts owed to the U. S. and foreign creditors, Theodore Roosevelt declared the U. S. inten-

tion of exercising "international police power" in the Western Hemisphere where necessary. The U. S. accordingly administered customs and managed debt payments of the Dominican Republic from 1904 to 1908.

NICARAGUA (1911): The possibility of foreign control over Nicaragua's canal led to U. S. intervention and agreement. The U. S. landed Marines in Nicaragua in 1911, 1912 to protect American interests. A small detachment remained until 1914.

MEXICO (1914): Mexican Dictator Huerta opposed by President Wilson, had the support of European governments. An incident involving unarmed U. S. sailors in Tampico led to the landing of U. S. forces on Mexican soil. Vera Cruz was bombarded by Navy to prevent the landing of munitions from a German vessel. At the point of both powers agreed to mediation by Argentina, Brazil and Chile. Huerta abdicated. Carranza succeeded to the presidency.

HAITI (1915): U. S. Marines imposed a military occupation. Haiti signed a treaty making it a virtual protectorate of the U. S. until troops were withdrawn in 1934.

CO (1916): Raids by Pancho Villa
merican lives on both sides of the
President Carranza consented to a
expedition lead by Gen. Pershing,
tagonism grew in Mexico. Wilson

withdrew the U. S. force when war with
Germany became imminent.

DOMINICAN REPUBLIC (1916): Renewed
intervention in the Dominican Republic
with internal administration by U. S. naval
officers lasted until 1924.

Insignia and Ranks of the Armed Forces

Army, Air Force and Marines		Navy and Coast Guard		
Insignia	Rank	Insignia	Rank	Stripes ¹
stars	General of the Army, AF	Five silver stars	Fleet Admiral	1-4-0
stars	General	Four silver stars	Admiral	1-3-0
er stars	Lieutenant General	Three silver stars	Vice Admiral	1-2-0
stars	Major General	Two silver stars	Rear Admiral	1-1-0
star	Brigadier General	One silver star	Commodore	1-0-0 ²
e	Colonel	Silver eagle	Captain	0-4-0
leaf	Lieutenant Colonel	Silver oak leaf	Commander	0-3-0
af	Major	Gold oak leaf	Lt. Commander	0-2-1
bars	Captain	Two silver bars	Lieutenant	0-2-0
ar	First Lieutenant	One silver bar	Lieutenant (jg)	0-1-1
ar	Second Lieutenant	One gold bar	Ensign	0-1-0
with	Chief Warrant Officer	Silver bar with	Chief Warrant Officer	
bands ³	(W-4)	3 enamel bands ³	(W-4)	0-1-0 ⁴
with	Chief Warrant Officer	Silver bar with	Chief Warrant Officer	
bands ³	(W-3)	2 enamel bands ³	(W-3)	0-1-0 ⁵
th	Chief Warrant Officer	Gold bar with	Chief Warrant Officer	
bands ³	(W-2)	3 enamel bands ³	(W-2)	0-1-0 ⁶
th	Warrant Officer (W-1)	Gold bar with	Warrant Officer (W-1)	
bands ³		2 enamel bands ³		0-0-1 ⁶

embroidery; first figure is number of 2-in. stripes, second is number of 1/2-in. stripes, third is number of
pes. ² Wartime only. ³ Bar is 3/8 in. by 1 1/8 in. for Army, Air Force and Navy, 1/4 in. by 3/4 in. for
rps. Enamel bands are brown for Army, sky blue for Air Force, scarlet for Marines and blue for Navy.
K. ⁴ Two breaks. ⁵ Three breaks.

Pay Grades of Enlisted Personnel

Source: Department of Defense, Public Information Office.

rank ¹	Air Force ranks	Marine ranks	Navy ranks	Pay grades
Major	Chief Master Sergeant	Sergeant Major and Mas- ter Gunnery Sergeant	Mast. Ch. Petty Officer	E-9
Master Sgt.	Sr. Master Sergeant	1st Sgt. and Master Sgt.	Sr. Ch. Petty Officer	E-8
Class	Master Sergeant	Gunnery Sergeant	Chief Petty Officer	E-7
nt	Technical Sergeant	Staff Sergeant	Petty Officer 1st Class	E-6
	Staff Sergeant	Sergeant	Petty Officer 2nd Class	E-5
Class	Airman 1st Class	Corporal	Petty Officer 3rd Class	E-4
	Airman 2nd Class	Lance Corporal	Seaman	E-3
	Airman 3rd Class	Private 1st Class Marine	Seaman Apprentice	E-2
	Airman	Private	Seaman Recruit	E-1

Specialist pay grades correspond to numbers: Specialist Nine (E-9) etc.

Monthly Salaries of Enlisted Personnel by Years of Service

12 yrs service: \$380; 12-14 yrs: \$390;	14 yrs: \$400; 14-16 yrs: \$410; 16-18 yrs: \$420; 18-20 yrs: \$430; over 22 yrs: \$440.	10-12 yrs: \$245; 10-12 yrs: \$255; 12-14 yrs: \$265; 14-16 yrs: \$275; 16-18 yrs: \$280; over 18 yrs: \$290.
0 yrs service: \$310; 10-12 yrs: \$320;	14 yrs: \$330; 14-16 yrs: \$340; 16-18 yrs: \$350; 18-20 yrs: \$360; 20-22 yrs: \$370; over 22 yrs: \$380.	E-5—Under 2 yrs. service: \$145.24; 2-4 yrs: \$180; 4-6 yrs: \$205; 6-8 yrs: \$210; 8-10 yrs: \$220; over 10 yrs: \$240.
er 2 yrs service: \$206.39; 2-4 yrs: \$210; 4-6 yrs: \$250; 6-8 yrs: \$260; 8-10 yrs: \$270; 10-12 yrs: \$285; 12-14 yrs: \$290; 14-16 yrs: \$310; 16-18 yrs: \$325; 18-20 yrs: \$340; over 20 yrs: \$350.	er 2 yrs service: \$175.81; 2-4 yrs: \$180; 4-6 yrs: \$225; 6-8 yrs: \$235; 8-10 yrs: \$240; over 10 yrs: \$260.	E-4—Under 2 yrs service: \$122.30; 2-3 yrs: \$150; 3-4 yrs: \$160; 4-6 yrs: \$170; 6-8 yrs: \$180; over 8 yrs: \$190.
		E-3—Under 2 yrs service: \$99.37; 2-4 yrs: \$124; over 4 yrs: \$141.
		E-2—Under 2 yrs service: \$85.80; over 2 yrs: \$108.
		E-1—Under 4 mos service: \$78; 4 mos-2 yrs: \$83.20; over 2 yrs: \$105.

ed member may not be placed in pay grade E-8 or E-9 until he has completed at least 8 years or 10 years,
of cumulative service creditable in the computation of his basic pay.
LY ALLOWANCE FOR QUARTERS: No dependents, \$51.30 for all pay grades; 1 dependent, \$51.30
s, \$96.90 for all pay grades.

Pay Grades of Commissioned Officers and Warrant Officers

Source: Department of Defense, Public Information Office.

Rank			Monthly allowance for quarters	
Army, Air Force and Marine Corps	Navy, Coast Guard and Coast and Geodetic Survey	Public Health Service	Pay grade	With dependents
General	Admiral	.....	O-10	\$171.00
Lieutenant General	Vice Admiral	.....	O-9	171.00
Major General	Rear Admiral (upper half)	Surgeon General; Deputy Surgeon General; Assistant Surgeon General having rank of Major General	O-8	171.00
Brigadier General	Rear Admiral (lower half) and Commodore	Assistant Surgeon General having rank of Brigadier General	O-7	171.00
Colonel	Captain	Director Grade	O-6	136.80
Lieutenant Colonel	Commander	Senior Grade	O-5	136.80
Major	Lieutenant Commander	Full Grade	O-4	119.70
Captain	Lieutenant	Senior Assistant Grade	O-3	102.60
First Lieutenant	Lieutenant (junior grade)	Assistant Grade	O-2	94.20
Second Lieutenant	Ensign	Junior Assistant Grade	O-1	85.50
Chief Warrant Officer	Chief Warrant Officer	.....	W-4	119.70
Chief Warrant Officer	Chief Warrant Officer	.....	W-3	102.60
Chief Warrant Officer	Chief Warrant Officer	.....	W-2	94.20
Warrant Officer	Warrant Officer	.....	W-1	85.50

Monthly Salaries of Officers by Years of Service

O-10* —Under 2 yrs service: \$1,200; 2-8 yrs: \$1,250; 8-12 yrs: \$1,300; 12-16 yrs: \$1,400; 16-20 yrs: \$1,500; 20-26 yrs: \$1,600; over 26 yrs: \$1,700.	O-3† —4-6 yrs service: \$415; 6-8 yrs: 8-10 yrs: \$460; 10-12 yrs: \$480; yrs: \$510; over 14 yrs: \$535.
O-9 —Under 2 yrs service: \$1,063.30; 2-3 yrs: \$1,100; 3-8 yrs: \$1,122; 8-12 yrs: \$1,150; 12-16 yrs: \$1,200; 16-20 yrs: \$1,300; 20-26 yrs: \$1,400; over 26 yrs: \$1,500.	O-2† —Under 2 yrs service: \$259.36; 2-3 yrs: \$291; 3-4 yrs: \$360; 4-6 yrs: over 6 yrs: \$380.
O-8 —Under 2 yrs service: \$963.30; 2-3 yrs: \$1,000; 3-8 yrs: \$1,022; 8-12 yrs: \$1,100; 12-16 yrs: \$1,150; 16-18 yrs: \$1,200; 18-20 yrs: \$1,250; 20-22 yrs: \$1,300; over 22 yrs: \$1,350.	O-2† —4-6 yrs service: \$370; 6-8 yrs: 8-10 yrs: \$395; 10-12 yrs: \$415; yrs: \$435; over 14 yrs: \$450.
O-7 —Under 2 yrs service: \$800.28; 2-6 yrs: \$860; 6-10 yrs: \$900; 10-14 yrs: \$950; 14-16 yrs: \$1,000; 16-18 yrs: \$1,100; over 18 yrs: \$1,175.	O-1† —Under 2 yrs service: \$222.30; 2-3 yrs: \$251; over 3 yrs: \$314.
O-6 —Under 2 yrs service: \$592.80; 2-3 yrs: \$628; 3-14 yrs: \$670; 14-16 yrs: \$690; 16-18 yrs: \$800; 18-20 yrs: \$840; 20-22 yrs: \$860; 22-26 yrs: \$910; over 26 yrs: \$985.	O-1† —4-6 yrs service: \$314; 6-8 yrs: \$330; 8-10 yrs: \$350; 10-12 yrs: \$365; yrs: \$380; over 14 yrs: \$400.
O-5 —Under 2 yrs service: \$474.24; 2-3 yrs: \$503; 3-10 yrs: \$540; 10-12 yrs: \$560; 12-14 yrs: \$590; 14-16 yrs: \$630; 16-18 yrs: \$680; 18-20 yrs: \$720; 20-22 yrs: \$745; over 22 yrs: \$775.	W-4 —Under 2 yrs service: \$332.90; 2-4 yrs: \$376; 4-6 yrs: \$383; 6-8 yrs: 8-10 yrs: \$416; 10-12 yrs: \$435; yrs: \$465; 14-16 yrs: \$486; 16-18 yrs: \$504; 18-20 yrs: \$516; 20-22 yrs: 22-26 yrs: \$543; 26-30 yrs: \$575; 30 yrs: \$595.
O-4 —Under 2 yrs service: \$400.14; 2-3 yrs: \$424; 3-6 yrs: \$455; 6-8 yrs: \$465; 8-10 yrs: \$485; 10-12 yrs: \$520; 12-14 yrs: \$550; 14-16 yrs: \$570; 16-18 yrs: \$610; over 18 yrs: \$630.	W-3 —Under 2 yrs: \$302.64; 2-4 yrs: 4-6 yrs: \$348; 6-8 yrs: \$353; 8-10 yrs: \$380; 10-12 yrs: \$398; 12-14 yrs: 14-16 yrs: \$427; 16-18 yrs: \$441; 20 yrs: \$458; 20-22 yrs: \$470; 22-24 yrs: \$487; over 26 yrs: \$506.
O-3† —Under 2 yrs service: \$326.04; 2-3 yrs: \$346; 3-4 yrs: \$372; 4-6 yrs: \$415; 6-8 yrs: \$440; 8-10 yrs: \$460; 10-12 yrs: \$480; 12-14 yrs: \$510; over 14 yrs: \$525.	W-2 —Under 2 yrs: \$264.82; 2-4 yrs: 4-6 yrs: \$307; 6-8 yrs: \$328; 8-10 yrs: \$342; 10-12 yrs: \$355; 12-14 yrs: 14-16 yrs: \$381; 16-18 yrs: \$393; 20 yrs: \$406; 20-22 yrs: \$417; over 22 yrs: \$440.
	W1 —Under 2 yrs: \$219.42; 2-4 yrs: 4-6 yrs: \$285; 6-8 yrs: \$299; 8-10 yrs: \$313; 10-12 yrs: \$334; 12-14 yrs: 14-16 yrs: \$354; 16-18 yrs: \$364; 20 yrs: \$375; over 20 yrs: \$380.

* While serving as Chairman of Joint Chiefs of Staff, Chief of Staff of the Army, Chief of Naval Operations, Chief of Staff of the Air Force, or Commandant of the Marine Corps, basic pay for this grade is \$1,875 regardless of length of service. † For commissioned officers who have not been credited with over 4 years' active service as an enlisted member. ‡ For commissioned officers who have been credited with over 4 years' active service as an enlisted member.

Special Incentive Pay Rates

ers of the uniformed services are to receive special pay for special duty. In addition to the incentive aircraft and submarine crews listed

elsewhere in this section, the following types of hazardous duty receive flat rates of \$110 per month for officers and \$55 per month for enlisted personnel.

quent and regular participation in ights not as a crew member.

chute jumping as an essential part ry duty.

ry involving contact with lepers.

olition of explosives as primary ining included).

marine escape training tank duty.

sea diving duty (including helium-iving).

an acceleration or deceleration duty.

pressure chamber duty (inside ob-

as human test subject in thermal periments.

Medical and Dental Officers

y incentive pay for medical and acers is based on cumulative service:

0-2 years, \$100; 2-6 years, \$150; 6-10 years, \$200; over 10 years, \$250.

Diving as in Salvage and Repair

The monthly rate is not less than \$13 or more than \$33, plus \$5.50 for each diving hour spent in salvage or repair operations. Pay applies to pay grades E-1 through E-9 only.

Sea and Foreign Duty

Pay grade	Monthly rate	Pay grade	Monthly rate
E-7, E-8, E-9.....	\$22.50	E-4.....	\$13.00
E-6.....	20.00	E-3.....	9.00
E-5.....	16.00	E-2, E-1.....	8.00

Proficiency Pay

sted member designated as possess-al proficiency in a military skill

advanced to any enlisted pay grade gher than his pay grade at the time ation; or

paid proficiency pay at a monthly to exceed the following maximum the proficiency rating to which he

is assigned: Rating P-1, \$50; P-2, \$100; P-3, \$150.

An enlisted member with less than 8 or 10, as the case may be, cumulative years of enlisted service for basic pay purposes, who is advanced to pay grade E-8 or E-9, respectively, is entitled to the minimum amount of pay prescribed for that pay grade until his cumulative years of service entitle him to a higher rate.

Special Pay for Certain Designated Officers

in pay grades O-3 through O-6 who itions of unusual responsibility e of a critical nature to the service , may receive special pay, in addi-

tion to any other pay prescribed by law, at a monthly rate as follows: Pay grades O-3 and O-4, \$50; O-5, \$100; O-6, \$150.

Arlington National Cemetery

n National Cemetery occupies 420 Virginia on the Potomac River opposite Washington. This land was he estate of John Parke Custis, Washington's son, who built the which later became the home of Lee. In 1864 Arlington became a military cemetery. Many thousands s as well as hundreds of distin-

guished Americans are buried there. In 1921, an Unknown Soldier from World War I was buried in a temporary crypt in the cemetery; the completed tomb was dedicated in 1932. Two more Unknowns, one from World War II and one from the Korean War, were buried May 30, 1958. In April 1959, the 100,000th body was interred in Arlington National Cemetery.

The American's Creed

By William Tyler Page

believe in the United States of America as a government of the people, by ople, for the people; whose just powers are derived from the consent of verned; a democracy in a republic; a sovereign Nation of many sovereign a perfect union, one and inseparable; established upon those principles dom, equality, justice, and humanity for which American patriots sacri-their lives and fortunes.

herefore believe it is my duty to my country to love it; to support its Con-on; to obey its laws; to respect its flag, and to defend it against all enemies."

: William Tyler Page, Clerk of the U.S. House of Representatives, wrote "The American's Creed" It was accepted by the House on behalf of the American people on April 3, 1918.

Incentive Pay for Hazardous Duty (As an Aircraft or Submarine Crew Member)

Pay grade	Under 2 yrs.	Over 2 yrs.	Over 3 yrs.	Over 4 yrs.	Over 6 yrs.	Over 8 yrs.	Over 10 yrs.
O-9, O-10.....	\$165.00	\$165.00	\$165.00	\$165.00	\$165.00	\$165.00	\$165.00
O-8.....	155.00	155.00	165.00	165.00	165.00	165.00	165.00
O-7.....	150.00	150.00	160.00	160.00	160.00	160.00	160.00
O-6.....	200.00	200.00	215.00	215.00	215.00	215.00	215.00
O-5.....	190.00	190.00	205.00	205.00	205.00	205.00	205.00
O-4.....	170.00	170.00	185.00	185.00	185.00	185.00	185.00
O-3.....	145.00	145.00	155.00	165.00	180.00	185.00	190.00
O-2.....	115.00	125.00	150.00	150.00	160.00	165.00	170.00
O-1.....	100.00	105.00	135.00	135.00	140.00	145.00	150.00
W-4.....	115.00	115.00	115.00	115.00	120.00	125.00	130.00
W-3.....	110.00	115.00	115.00	115.00	120.00	120.00	125.00
W-2.....	105.00	110.00	110.00	110.00	115.00	120.00	125.00
W-1.....	100.00	105.00	105.00	105.00	110.00	120.00	125.00
E-8, E-9.....	105.00	105.00	105.00	105.00	105.00	105.00	105.00
E-7.....	80.00	85.00	85.00	85.00	90.00	95.00	100.00
E-6.....	70.00	75.00	75.00	80.00	85.00	90.00	95.00
E-5.....	60.00	70.00	70.00	80.00	80.00	85.00	90.00
E-4.....	55.00	65.00	65.00	70.00	75.00	80.00	80.00
E-3.....	55.00	60.00	60.00	60.00	60.00	60.00	60.00
E-2.....	50.00	60.00	60.00	60.00	60.00	60.00	60.00
E-1.....	50.00	55.00	55.00	55.00	55.00	55.00	55.00

Pay grade	Over 12 yrs.	Over 14 yrs.	Over 16 yrs.	Over 18 yrs.	Over 22 yrs.	Over 26 yrs.	Over 30 yrs.
O-9, O-10.....	\$165.00	\$165.00	\$165.00	\$165.00	\$165.00	\$165.00	\$165.00
O-8.....	165.00	165.00	165.00	165.00	165.00	165.00	165.00
O-7.....	160.00	160.00	160.00	160.00	160.00	160.00	160.00
O-6.....	215.00	215.00	220.00	245.00	245.00	245.00	245.00
O-5.....	210.00	225.00	230.00	245.00	245.00	245.00	245.00
O-4.....	215.00	220.00	230.00	240.00	240.00	240.00	240.00
O-3.....	200.00	205.00	205.00	205.00	205.00	205.00	205.00
O-2.....	180.00	185.00	185.00	185.00	185.00	185.00	185.00
O-1.....	160.00	170.00	170.00	170.00	170.00	170.00	170.00
W-4.....	145.00	155.00	160.00	165.00	165.00	165.00	165.00
W-3.....	135.00	140.00	140.00	140.00	140.00	140.00	140.00
W-2.....	130.00	135.00	135.00	135.00	135.00	135.00	135.00
W-1.....	130.00	130.00	130.00	130.00	130.00	130.00	130.00
E-8, E-9.....	105.00	105.00	105.00	105.00	105.00	105.00	105.00
E-7.....	105.00	105.00	105.00	105.00	105.00	105.00	105.00
E-6.....	95.00	100.00	100.00	100.00	100.00	100.00	100.00
E-5.....	95.00	95.00	95.00	95.00	95.00	95.00	95.00
E-4.....	80.00	80.00	80.00	80.00	80.00	80.00	80.00
E-3.....	60.00	60.00	60.00	60.00	60.00	60.00	60.00
E-2.....	60.00	60.00	60.00	60.00	60.00	60.00	60.00
E-1.....	55.00	55.00	55.00	55.00	55.00	55.00	55.00

Extra Pay for Wartime Service

Act of March 3, 1847, during the Mexican War, provided for \$2 a month extra pay for "distinguished service." This continued in force beyond the war and applied in the Civil War.

In the Spanish American War, there was a 20 per cent increase of enlisted men's pay for war service.

In World War I, additional pay was offered for all types of services, usually as incentive for special qualifications as gun pointer, expert rifleman, etc. Among these items is pay for certificate of merit of \$2 a month. By the new law passed in 1920, the number of reasons for additional pay had expanded. Recipients of the Medal of Honor, Distinguished Service Cross and Distinguished Service Medal received \$2 a month extra, while each bar in lieu of these medals also

added another \$2 a month. Added to this a foreign service bonus of 20 per cent.

Act of June 30, 1944 authorized compensation of \$5 a month to enlisted men qualified as expert infantrymen and \$10 to those qualified as combat infantrymen. These amounts were payable for the duration of the war and six months thereafter.

By the Act of July 6, 1945 for the duration of war and for six months thereafter enlisted men entitled to wear Medical Badges received additional pay of \$10.

Act of July 10, 1952 authorized \$10 a month for each month beginning after June 30, 1950, for which the member was entitled to receive basic pay and during which he was a member of a combat unit in Korea. This applies to officers and enlisted men.

U. S. Armed Forces Personnel

Source: U. S. Department of Defense, U. S. Coast Guard.

	Army	Air Force ²	Navy	Marines	Men ³	Women	Coast Guard ⁴
.....	139,486	.....	95,053	17,260	250,864	935	10,303
.....	179,968	.....	113,617	18,223	310,804	1,004	10,066
.....	189,839	.....	125,202	19,432	333,363	1,110	10,064
.....	269,023	.....	160,997	28,345	456,984	1,381	13,621
.....	1,462,315	.....	284,427	54,359	1,794,997	6,104	19,036
.....	3,075,608	.....	640,570	142,613	3,831,571	27,220	58,998
.....	6,994,472	.....	1,741,750	308,523	8,915,248	129,497	154,976
.....	7,994,750	.....	2,981,365	475,604	11,229,682	222,037	169,264
.....	8,267,958	.....	3,380,817	474,680	11,923,250	200,205	171,518
.....	1,891,011	.....	983,398	155,679	2,984,096	45,992	29,736
.....	991,285	.....	498,661	93,053	1,564,717	18,282	18,972
.....	660,473	419,347	449,575	85,965	1,597,280	18,080	23,326
.....	593,167	411,277	381,538	74,279	1,438,192	22,069	23,190
.....	1,531,774	788,381	736,680	192,620	3,209,830	39,625	29,000
.....	1,533,815	977,593	794,440	249,219	3,509,582	45,485	34,148
.....	1,109,296	959,946	660,695	205,170	2,899,916	35,191	28,500
.....	997,994	919,835	677,108	200,861	2,763,625	32,173	28,322
.....	898,925	871,156	641,005	189,495	2,569,520 ⁵	31,176	28,889 ⁵
.....	861,964	840,435	626,340	175,571	.....	31,854	29,863 ⁵

ine 30. ² Before July 26, 1947, when the National Military Establishment was established, the Air Force of the Army. ³ Not including men in the Coast Guard. ⁴ In peacetime, the Coast Guard operates under ment of the Treasury; in time of war, it is attached to the Navy Department. ⁵ As of June 1.

Veterans' Benefits

gh benefits of various kinds date Colonial days, veterans of World ere the first to receive disability ation for injuries, allotments for ort of dependents, life insurance, medical care and vocational reon. Beginning with 1940, these were slowly broadened.

llowing benefits available to vet-World War II and the Korean War ific time limitations and, in most e applicable only to those whose was not dishonorable.

ion and Training: *Veterans of the ar*: For a maximum period of 1½ e duration of active service, not 36 months, the VA pays sums rom \$110 to \$160 per month to-istence, tuition, supplies, etc.

loyment allowances: A Korea vet- y be eligible for unemployment er the Korean GI Bill or, if he ce after Oct. 27, 1958, under a . Both benefits are administered local state employment security

GI loans are made for a variety es, such as: to buy or build a conduct a business or farming e; to buy livestock, machinery, d other equipment; and to use ing capital. The VA will guar- lender against loss up to 60% me loan with a maximum of a other loans, the guarantee is up ith a maximum of \$4,000 invol- estate and \$2,000 on non-real ns. The interest rate in all cases exceed 5¼ % per year. sation and rehabilitation bene-

fits are available to those having some service-connected illness or disability:

Disability Compensation: The VA pays from \$19 to \$225 per month, and for specific conditions up to \$450 per month, plus allowances for dependents, where the disability is rated 50% or more.

Vocational rehabilitation: Necessary training expenses, special equipment, etc., toward a definite job objective are paid for, plus a monthly allowance varying from \$65 to \$120 in addition to compensation.

Medical and dental care: This includes complete care in VA or certain other Federal hospitals. It also covers treatment (not requiring hospitalization) at a VA field station or by an approved private physician or dentist. Medicine, appliances, equipment, etc., are supplied. Full domiciliary care is also provided where necessary.

War Orphans Education: \$110 a month for up to 36 months of schooling may be paid to sons and daughters of veterans who died of service-connected causes. Students must usually be between 18 and 23.

Pensions: The Veterans Pension Act of 1959, effective July 1, 1960, provides a sliding scale formula for pension benefits. These benefits are based on need to a greater extent than before. However, pensioners who were on the rolls prior to July 1 have a choice of remaining under the earlier system or of electing coverage under the new law. Widows and orphans of World War II and Korea veterans have been given the same eligibility status as World War I widows and orphans.

NOTE: See your local Veterans Administration (VA) for detailed information.

ALLOWANCES FOR SUBSISTENCE

Officers receive \$47.88 per month. Enlisted personnel receive allowances for subsistence under the following provisions: (1) when rations in kind are not available, \$2.57 per day; (2) when permission to mess separately is granted, \$1.10 per day; (3)* when assigned to duty under emergency conditions where no government messing facilities are available, up to and not to exceed \$3.42 per day.

* Applicable only within the U. S.

U. S. Navy Combatant Vessels

Type	Number
Attack Carriers.....	1
Support Carriers.....	1
Cruiser types.....	22
Destroyers.....	11
Submarines.....	1
Minecraft.....	1
Patrol Craft.....	1
Amphibious.....	1
Auxiliaries.....	1
Total.....	81

* Numbers are approximate; exact figures are classified information.

U. S. Casualties in Major Wars

Source: Department of Defense.

War	Branch of service	Numbers engaged	Battle deaths	Other deaths	Total deaths	Wounds not mortal	Total casualties
Revolutionary War 1775 to 1783	Army	.....	4,044	.....	.....	6,004	.....
	Navy	.....	342	.....	.....	114	.....
	Marines	.....	49	.....	.....	70	.....
	Total	.....	4,435	.....	.....	6,188	.....
War of 1812 1812 to 1815	Army	.....	1,950	.....	.....	4,000	.....
	Navy	.....	265	.....	.....	439	.....
	Marines	.....	45	.....	.....	66	.....
	Total	286,730	2,260	.....	.....	4,505	.....
Mexican War 1846 to 1848	Army	.....	1,721	11,550	13,271	4,102	17,373
	Navy	.....	1	.....	.....	3	.....
	Marines	.....	11	.....	.....	47	.....
	Total	78,718	1,733	.....	.....	4,152	.....
Civil War ² 1861 to 1865	Army	2,128,948	138,154	221,374	359,528	280,040	639,872
	Navy	.....	2,112	2,411	4,523	1,710	6,246
	Marines	84,415	148	312	460	131	629
	Total	2,213,363	140,414	224,097	364,511	281,881	646,402
Spanish-American War 1898	Army	280,564	369	2,061	2,430	1,594	4,053
	Navy	22,875	10	0	10	47	67
	Marines	3,321	6	0	6	21	27
	Total	306,760	385	2,061	2,446	1,662	4,147
World War I 1917 to 1918	Army	4,057,101	50,510	55,868	106,378	193,663	300,000
	Navy	599,051	431	6,856	7,287	819	8,526
	Marines	78,839	2,461	390	2,851	9,520	12,771
	Total	4,734,991	53,402	63,114	116,516	204,002	320,000
World War II 1941 to 1945	Army ³	11,260,000	234,874	83,400	318,274	565,861	884,000
	Navy	4,183,466	36,950	25,664	62,614	37,778	100,000
	Marines	669,100	19,733	4,778	24,511	67,207	91,000
	Total	16,112,566	291,557	113,842	405,399	670,846	1,076,000
Korean War 1950 to 1953	Army	2,834,000	27,704	9,429	37,133	77,596	114,000
	Navy	1,177,000	458	4,043	4,501	1,576	6,000
	Marines	424,000	4,267	1,261	5,528	23,744	29,000
	Air Force	1,285,000	1,200	5,884	7,084	368	7,000
	Total	5,720,000	33,629	20,617	54,246	103,284	157,000

¹ Excludes captured or interned and missing in action who were subsequently returned to military control. ² forces only. Totals should probably be somewhat larger as data on disposition of prisoners are far from complete. ³ Army data include Air Force. NOTE: All data are subject to revision. For wars before World War I, information represents best data from available records. However, due to incomplete records and possible differences in usage of terminology, reporting systems, etc., figures should be considered estimates. Leaders (.....) indicate information is not available.

Casualties in World War II*

(Additional U. S. figures are to be found on p. 618)

Country	Men in war	Battle deaths	Other deaths	Wounded	Still missing
.....	1,000,000	26,976	6,877	180,864	.....
.....	800,000	280,000	24,000	350,117	.....
.....	625,000	8,460	40,564 ²	55,513 ¹	.....
.....	40,334	943	32	4,222	.....
.....	339,760	6,671	.....	21,878	3,599
.....	1,041,080	32,412	9,630	53,145	0
.....	17,250,521	1,324,516	.....	1,762,006	130,154
.....	.....	6,683 ³	.....	8,017	.....
.....	.....	4,339	.....	.....	.....
.....	500,000	79,047	1,961	50,000	6,000
.....	.....	201,568	261,577	400,000	140,000
.....	20,000,000	3,250,000 ⁴	3,350,000	7,250,000	1,300,000
.....	.....	17,024	391,000 ⁵	47,290	.....
.....	.....	147,435	.....	89,313	125,556
.....	2,393,891	32,121	5,360 ¹⁰	64,354	.....
.....	3,100,000	149,496 ⁶	.....	66,716	135,070
.....	9,700,000	1,270,000	620,000	140,000	85,000
.....	280,000	6,500	429	2,860	87
.....	194,000	11,625 ⁷	.....	17,000	46 ⁸
.....	75,000	2,000	8,262	.....	0
.....	.....	664,000	5,384,000	530,000	.....
.....	650,000 ⁹	350,000 ⁸	.....	.....	180,000
.....	410,056	2,473	9,607	.....	.....
.....	.....	6,115,000 ³	.....	14,012,000	.....
.....	5,896,000	357,116 ³	.....	369,267	46,079
.....	3,741,000	305,000	1,401,000	425,000	.....
.....	16,112,566	291,557	113,842	670,846	.....

..... only. ² Also 20,000 Jews and non-Belgians living in Belgium. ³ Deaths from all causes. ⁴ Figures as of July 7, 1937–Sept. 2, 1945, and concern only Chinese regular troops. They do not include casualties of guerrillas and local military corps. ⁵ Includes 261,000 dead of starvation. ⁶ As of Dec. 31, 1946. ⁷ Against Russia; 385,847 against Nazi Germany. ⁸ Against Soviet Russia; 169,822 against Nazi Germany. Figures include deaths, wounded, and missing. ⁹ Army and Navy figures. ¹⁰ Does not include deaths due to diseases.

Casualties in World War I*

(Additional U. S. figures are to be found on p. 618)

	Total mobilized forces	Killed or died ¹	Wounded	Prisoners or missing	Total casualties
.....	7,800,000	1,200,000	3,620,000	2,200,000	7,020,000
.....	267,000	13,716	44,686	34,659	93,061
.....	8,904,467	908,371	2,090,212	191,652	3,190,235
.....	1,200,000	87,500	152,390	27,029	266,919
.....	8,410,000	1,357,800	4,266,000	537,000	6,160,800
.....	11,000,000	1,773,700	4,216,058	1,152,800	7,142,558
.....	230,000	5,000	21,000	1,000	27,000
.....	5,615,000	650,000	947,000	600,000	2,197,000
.....	800,000	300	907	3	1,210
.....	50,000	3,000	10,000	7,000	20,000
.....	100,000	7,222	13,751	12,318	33,291
.....	750,000	335,706	120,000	80,000	535,706
.....	12,000,000	1,700,000	4,950,000	2,500,000	9,150,000
.....	707,343	45,000	133,148	152,958	331,106
.....	2,850,000	325,000	400,000	250,000	975,000
.....	4,734,991	116,516	204,002	.....	320,518

..... deaths from all causes. ² Official figures. These figures are unofficial estimates.

FEDERAL INCOME TAX

If you are a citizen or a resident of the United States, and if your gross income for the year amounts to \$600 or more, you are required to file a return. This requirement applies to minors, as well as adults, and must be met even if you do not pay a tax.

If you are more than 65 years old, you are required to file only if your gross income is \$1,200 or more.

You must pay part of your tax in installments in the year in which you earned the income. This is the "pay-as-you-go" system. You are generally required to pay the rest of your tax when you file your return. It may turn out that you don't owe any additional tax when you file your

return, or you may even be entitled refund, in which case the refund will be paid to you automatically after your return is filed.

The "pay-as-you-go" system works in two ways, through withholding and deduction of estimated tax. You may be subject to either or both of these requirements.

If you are married, you and your spouse are allowed to report your combined income and your combined deductions on a single return. This is called a joint return. Your combined income is then taxed as if it were yours and half hers. This will usually result in a lower tax.

Withholding Table
for Employees Paid Weekly

If the wages are—		And the number of withholding exemptions claimed is—									
At least	But less than	0	1	2	3	4	5	6	7	8	9
		The amount of tax to be withheld shall be—									
		18% of wages									
\$0.....	\$13.....	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$13.....	\$14.....	\$2.40	.10	0	0	0	0	0	0	0	0
\$14.....	\$15.....	2.60	.30	0	0	0	0	0	0	0	0
\$15.....	\$16.....	2.80	.50	0	0	0	0	0	0	0	0
\$16.....	\$17.....	3.00	.70	0	0	0	0	0	0	0	0
\$17.....	\$18.....	3.20	.80	0	0	0	0	0	0	0	0
\$18.....	\$19.....	3.30	1.00	0	0	0	0	0	0	0	0
\$19.....	\$20.....	3.50	1.20	0	0	0	0	0	0	0	0
\$20.....	\$21.....	3.70	1.40	0	0	0	0	0	0	0	0
\$21.....	\$22.....	3.90	1.60	0	0	0	0	0	0	0	0
\$22.....	\$23.....	4.10	1.70	0	0	0	0	0	0	0	0
\$23.....	\$24.....	4.20	1.90	0	0	0	0	0	0	0	0
\$24.....	\$25.....	4.40	2.10	0	0	0	0	0	0	0	0
\$25.....	\$26.....	4.60	2.30	0	0	0	0	0	0	0	0
\$26.....	\$27.....	4.80	2.50	.20	0	0	0	0	0	0	0
\$27.....	\$28.....	5.00	2.60	.30	0	0	0	0	0	0	0
\$28.....	\$29.....	5.10	2.80	.50	0	0	0	0	0	0	0
\$29.....	\$30.....	5.30	3.00	.70	0	0	0	0	0	0	0
\$30.....	\$31.....	5.50	3.20	.90	0	0	0	0	0	0	0
\$31.....	\$32.....	5.70	3.40	1.10	0	0	0	0	0	0	0
\$32.....	\$33.....	5.90	3.50	1.20	0	0	0	0	0	0	0
\$33.....	\$34.....	6.00	3.70	1.40	0	0	0	0	0	0	0
\$34.....	\$35.....	6.20	3.90	1.60	0	0	0	0	0	0	0
\$35.....	\$36.....	6.40	4.10	1.80	0	0	0	0	0	0	0

wages are—		And the number of withholding exemptions claimed is—										
		0	1	2	3	4	5	6	7	8	9	10 or more
But less than		The amount of tax to be withheld shall be—										
\$37.....	\$6.60	\$4.30	\$2.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$38.....	6.80	4.40	2.10	0	0	0	0	0	0	0	0	0
\$39.....	6.90	4.60	2.30	0	0	0	0	0	0	0	0	0
\$40.....	7.10	4.80	2.50	.20	0	0	0	0	0	0	0	0
\$41.....	7.30	5.00	2.70	.40	0	0	0	0	0	0	0	0
\$42.....	7.50	5.20	2.90	.50	0	0	0	0	0	0	0	0
\$43.....	7.70	5.30	3.00	.70	0	0	0	0	0	0	0	0
\$44.....	7.80	5.50	3.20	.90	0	0	0	0	0	0	0	0
\$45.....	8.00	5.70	3.40	1.10	0	0	0	0	0	0	0	0
\$46.....	8.20	5.90	3.60	1.30	0	0	0	0	0	0	0	0
\$47.....	8.40	6.10	3.80	1.40	0	0	0	0	0	0	0	0
\$48.....	8.60	6.20	3.90	1.60	0	0	0	0	0	0	0	0
\$49.....	8.70	6.40	4.10	1.80	0	0	0	0	0	0	0	0
\$50.....	8.90	6.60	4.30	2.00	0	0	0	0	0	0	0	0
\$51.....	9.10	6.80	4.50	2.20	0	0	0	0	0	0	0	0
\$52.....	9.30	7.00	4.70	2.30	0	0	0	0	0	0	0	0
\$53.....	9.50	7.10	4.80	2.50	.20	0	0	0	0	0	0	0
\$54.....	9.60	7.30	5.00	2.70	.40	0	0	0	0	0	0	0
\$55.....	9.80	7.50	5.20	2.90	.60	0	0	0	0	0	0	0
\$56.....	10.00	7.70	5.40	3.10	.80	0	0	0	0	0	0	0
\$57.....	10.20	7.90	5.60	3.20	.90	0	0	0	0	0	0	0
\$58.....	10.40	8.00	5.70	3.40	1.10	0	0	0	0	0	0	0
\$59.....	10.50	8.20	5.90	3.60	1.30	0	0	0	0	0	0	0
\$60.....	10.70	8.40	6.10	3.80	1.50	0	0	0	0	0	0	0
\$62.....	11.00	8.70	6.40	4.10	1.70	0	0	0	0	0	0	0
\$64.....	11.30	9.00	6.70	4.40	2.10	0	0	0	0	0	0	0
\$66.....	11.70	9.40	7.10	4.80	2.50	.20	0	0	0	0	0	0
\$68.....	12.10	9.80	7.40	5.10	2.80	.50	0	0	0	0	0	0
\$70.....	12.40	10.10	7.80	5.50	3.20	.90	0	0	0	0	0	0
\$72.....	12.80	10.50	8.20	5.90	3.50	1.20	0	0	0	0	0	0
\$74.....	13.10	10.80	8.50	6.20	3.90	1.60	0	0	0	0	0	0
\$76.....	13.50	11.20	8.90	6.60	4.30	2.00	0	0	0	0	0	0
\$78.....	13.90	11.60	9.20	6.90	4.60	2.30	0	0	0	0	0	0
\$80.....	14.20	11.90	9.60	7.30	5.00	2.70	.40	0	0	0	0	0
\$82.....	14.60	12.30	10.00	7.70	5.30	3.00	.70	0	0	0	0	0
\$84.....	14.90	12.60	10.30	8.00	5.70	3.40	1.10	0	0	0	0	0
\$86.....	15.30	13.00	10.70	8.40	6.10	3.80	1.50	0	0	0	0	0
\$88.....	15.70	13.40	11.00	8.70	6.40	4.10	1.80	0	0	0	0	0
\$90.....	16.00	13.70	11.40	9.10	6.80	4.50	2.20	0	0	0	0	0
\$92.....	16.40	14.10	11.80	9.50	7.10	4.80	2.50	.20	0	0	0	0
\$94.....	16.70	14.40	12.10	9.80	7.50	5.20	2.90	.60	0	0	0	0
\$96.....	17.10	14.80	12.50	10.20	7.90	5.60	3.30	.90	0	0	0	0
\$98.....	17.50	15.20	12.80	10.50	8.20	5.90	3.60	1.30	0	0	0	0
\$100.....	17.80	15.50	13.20	10.90	8.60	6.30	4.00	1.70	0	0	0	0
\$105.....	18.50	16.10	13.80	11.50	9.20	6.90	4.60	2.30	0	0	0	0
\$110.....	19.40	17.00	14.70	12.40	10.10	7.80	5.50	3.20	.90	0	0	0
\$115.....	20.30	17.90	15.60	13.30	11.00	8.70	6.40	4.10	1.80	0	0	0
\$120.....	21.20	18.80	16.50	14.20	11.90	9.60	7.30	5.00	2.70	.40	0	0
\$125.....	22.10	19.70	17.40	15.10	12.80	10.50	8.20	5.90	3.60	1.30	0	0
\$130.....	23.00	20.60	18.30	16.00	13.70	11.40	9.10	6.80	4.50	2.20	0	0
\$135.....	23.90	21.50	19.20	16.90	14.60	12.30	10.00	7.70	5.40	3.10	.80	0
\$140.....	24.80	22.40	20.10	17.80	15.50	13.20	10.90	8.60	6.30	4.00	1.70	0
\$145.....	25.70	23.30	21.00	18.70	16.40	14.10	11.80	9.50	7.20	4.90	2.60	0
\$150.....	26.60	24.20	21.90	19.60	17.30	15.00	12.70	10.40	8.10	5.80	3.50	0
\$160.....	27.90	25.60	23.30	21.00	18.70	16.40	14.10	11.70	9.40	7.10	4.80	0
\$170.....	29.70	27.40	25.10	22.80	20.50	18.20	15.90	13.50	11.20	8.90	6.60	0

If the wages are—		And the number of withholding exemptions claimed is—									
At least	But less than	0	1	2	3	4	5	6	7	8	9
		The amount of tax to be withheld shall be—									
\$170.....	\$180.....	\$31.50	\$29.20	\$26.90	\$24.60	\$22.30	\$20.00	\$17.70	\$15.30	\$13.00	\$10.70
\$180.....	\$190.....	33.30	31.00	28.70	26.40	24.10	21.80	19.50	17.10	14.80	12.50
\$190.....	\$200.....	35.10	32.80	30.50	28.20	25.90	23.60	21.30	18.90	16.60	14.30
		18 percent of the excess over \$200 plus—									
\$200 and over.....		36.00	33.70	31.40	29.10	26.80	24.50	22.20	19.80	17.50	15.20

Rate Table for Separate Returns

If your taxable income is:		Your tax is:	
Not over \$2,000		20% of the taxable income	
Over \$ 2,000 but not over \$ 4,000		\$ 400, plus 22% of excess over \$ 2,000	
Over \$ 4,000 but not over \$ 6,000		\$ 840, plus 26% of excess over \$ 4,000	
Over \$ 6,000 but not over \$ 8,000		\$ 1,360, plus 30% of excess over \$ 6,000	
Over \$ 8,000 but not over \$ 10,000		\$ 1,960, plus 34% of excess over \$ 8,000	
Over \$ 10,000 but not over \$ 12,000		\$ 2,640, plus 38% of excess over \$ 10,000	
Over \$ 12,000 but not over \$ 14,000		\$ 3,400, plus 43% of excess over \$ 12,000	
Over \$ 14,000 but not over \$ 16,000		\$ 4,260, plus 47% of excess over \$ 14,000	
Over \$ 16,000 but not over \$ 18,000		\$ 5,200, plus 50% of excess over \$ 16,000	
Over \$ 18,000 but not over \$ 20,000		\$ 6,200, plus 53% of excess over \$ 18,000	
Over \$ 20,000 but not over \$ 22,000		\$ 7,260, plus 56% of excess over \$ 20,000	
Over \$ 22,000 but not over \$ 26,000		\$ 8,380, plus 59% of excess over \$ 22,000	
Over \$ 26,000 but not over \$ 32,000		\$ 10,740, plus 62% of excess over \$ 26,000	
Over \$ 32,000 but not over \$ 38,000		\$ 14,460, plus 65% of excess over \$ 32,000	
Over \$ 38,000 but not over \$ 44,000		\$ 18,360, plus 69% of excess over \$ 38,000	
Over \$ 44,000 but not over \$ 50,000		\$ 22,500, plus 72% of excess over \$ 44,000	
Over \$ 50,000 but not over \$ 60,000		\$ 26,820, plus 75% of excess over \$ 50,000	
Over \$ 60,000 but not over \$ 70,000		\$ 34,320, plus 78% of excess over \$ 60,000	
Over \$ 70,000 but not over \$ 80,000		\$ 42,120, plus 81% of excess over \$ 70,000	
Over \$ 80,000 but not over \$ 90,000		\$ 50,220, plus 84% of excess over \$ 80,000	
Over \$ 90,000 but not over \$100,000		\$ 58,620, plus 87% of excess over \$ 90,000	
Over \$100,000 but not over \$150,000		\$ 67,320, plus 89% of excess over \$100,000	
Over \$150,000 but not over \$200,000		\$111,820, plus 90% of excess over \$150,000	
Over \$200,000		\$156,820, plus 91% of excess over \$200,000	

* The tax cannot in any event be more than 87% of taxable income.

Rate Table for Head of Household Returns

If your taxable income is:		Your tax is:	
Not over \$2,000		20% of the taxable income	
Over \$ 2,000 but not over \$ 4,000		\$ 400, plus 21% of excess over \$ 2,000	
Over \$ 4,000 but not over \$ 6,000		\$ 820, plus 24% of excess over \$ 4,000	
Over \$ 6,000 but not over \$ 8,000		\$ 1,300, plus 26% of excess over \$ 6,000	
Over \$ 8,000 but not over \$ 10,000		\$ 1,820, plus 30% of excess over \$ 8,000	
Over \$ 10,000 but not over \$ 12,000		\$ 2,420, plus 32% of excess over \$ 10,000	
Over \$ 12,000 but not over \$ 14,000		\$ 3,060, plus 36% of excess over \$ 12,000	
Over \$ 14,000 but not over \$ 16,000		\$ 3,780, plus 39% of excess over \$ 14,000	
Over \$ 16,000 but not over \$ 18,000		\$ 4,560, plus 42% of excess over \$ 16,000	
Over \$ 18,000 but not over \$ 20,000		\$ 5,400, plus 43% of excess over \$ 18,000	
Over \$ 20,000 but not over \$ 22,000		\$ 6,260, plus 47% of excess over \$ 20,000	
Over \$ 22,000 but not over \$ 24,000		\$ 7,200, plus 49% of excess over \$ 22,000	
Over \$ 24,000 but not over \$ 28,000		\$ 8,180, plus 52% of excess over \$ 24,000	
Over \$ 28,000 but not over \$ 32,000		\$ 10,260, plus 54% of excess over \$ 28,000	
Over \$ 32,000 but not over \$ 38,000		\$ 12,420, plus 58% of excess over \$ 32,000	
Over \$ 38,000 but not over \$ 44,000		\$ 15,900, plus 62% of excess over \$ 38,000	

Rate Table for Head of Household Returns (contd.)

Combined taxable income is:	Your tax is:
\$4,000 but not over \$ 50,000.....	\$ 19,620, plus 66% of excess over \$ 44,000
0,000 but not over \$ 60,000.....	\$ 23,580, plus 68% of excess over \$ 50,000
0,000 but not over \$ 70,000.....	\$ 30,380, plus 71% of excess over \$ 60,000
0,000 but not over \$ 80,000.....	\$ 37,480, plus 74% of excess over \$ 70,000
0,000 but not over \$ 90,000.....	\$ 44,880, plus 76% of excess over \$ 80,000
0,000 but not over \$100,000.....	\$ 52,480, plus 80% of excess over \$ 90,000
0,000 but not over \$150,000.....	\$ 60,480, plus 83% of excess over \$100,000
0,000 but not over \$200,000.....	\$101,980, plus 87% of excess over \$150,000
0,000 but not over \$300,000.....	\$145,480, plus 90% of excess over \$200,000*
0,000.....	\$235,480, plus 91% of excess over \$300,000*

* cannot in any event be more than 87% of taxable income.

Rate Table for Joint Returns

Combined taxable income is:	Your tax is:
\$4,000.....	20% of taxable income
\$4,000 but not over \$ 8,000.....	\$ 800, plus 22% of excess over \$ 4,000
8,000 but not over \$ 12,000.....	\$ 1,680, plus 26% of excess over \$ 8,000
12,000 but not over \$ 16,000.....	\$ 2,720, plus 30% of excess over \$ 12,000
16,000 but not over \$ 20,000.....	\$ 3,920, plus 34% of excess over \$ 16,000
20,000 but not over \$ 24,000.....	\$ 5,280, plus 38% of excess over \$ 20,000
24,000 but not over \$ 28,000.....	\$ 6,800, plus 43% of excess over \$ 24,000
28,000 but not over \$ 32,000.....	\$ 8,520, plus 47% of excess over \$ 28,000
32,000 but not over \$ 36,000.....	\$ 10,400, plus 50% of excess over \$ 32,000
36,000 but not over \$ 40,000.....	\$ 12,400, plus 53% of excess over \$ 36,000
40,000 but not over \$ 44,000.....	\$ 14,520, plus 56% of excess over \$ 40,000
44,000 but not over \$ 52,000.....	\$ 16,760, plus 59% of excess over \$ 44,000
52,000 but not over \$ 64,000.....	\$ 21,480, plus 62% of excess over \$ 52,000
64,000 but not over \$ 76,000.....	\$ 28,920, plus 65% of excess over \$ 64,000
76,000 but not over \$ 88,000.....	\$ 36,720, plus 69% of excess over \$ 76,000
88,000 but not over \$100,000.....	\$ 45,000, plus 72% of excess over \$ 88,000
100,000 but not over \$120,000.....	\$ 53,640, plus 75% of excess over \$100,000
120,000 but not over \$140,000.....	\$ 68,640, plus 78% of excess over \$120,000
140,000 but not over \$160,000.....	\$ 84,240, plus 81% of excess over \$140,000
160,000 but not over \$180,000.....	\$100,440, plus 84% of excess over \$160,000
180,000 but not over \$200,000.....	\$117,240, plus 87% of excess over \$180,000
200,000 but not over \$300,000.....	\$134,640, plus 89% of excess over \$200,000*
300,000 but not over \$400,000.....	\$223,640, plus 90% of excess over \$300,000*
400,000.....	\$313,640, plus 91% of excess over \$400,000*

* cannot in any event be more than 87% of combined taxable income.

SOCIAL SECURITY

The Social Security Act was passed in 1935 and subsequently amended in 1939, 1954, and 1958.

It is administered by the Department of Health, Education and Welfare, of the Social Security Administration

Survivors, and Disability Insurance

COVERED?

Everyone who works fairly regularly for an employer is covered. Self-employed doctors are the only ones not covered by this social security law.

To qualify for benefits or make payments possible for your survivors you must be in work covered by the law for a certain number of "quarters of coverage" after 1936 (for self-employment, after 1950). The number of quarters needed differs for different persons and depends on the date of your birth; in general, it is related to the length of time from 1936, from 1950, or from your twenty-first birthday and the time you reach retirement age. No one needs more than 40 quarters, and no one can qualify with less than 6. Your local social security office can tell you how long you need to work in covered employment under the present law.

WHO PAYS FOR THE INSURANCE?

Both workers and employers pay for the workers' insurance. Self-employed persons pay their own tax annually along with their income tax. Tax rates are scheduled to go up gradually until 1975:

Years	Workers and Employers Each to Pay	Self-employed to Pay
1959.....	2½%	3¾%
1960-62.....	3%	4½%
1963-65.....	3½%	5¼%
1965-68.....	4%	6%
1969 and after.....	4½%	6¾%

HOW TO APPLY FOR BENEFITS

You apply for benefits by filing a claim either in person or by mail at your nearest social security office. You can get the address either from the post office or from the phone book under the listing, United States Government—Department of Health, Education and Welfare—Social Security Administration. You will need certain kinds of proof, depending upon the type of benefit you are claiming. If it is an old-age benefit, you should have proof of age. A wife claiming old-age benefits based on her husband's earnings should have both proof of age and a copy of the marriage certificate. In the case of survivors' benefits, you will need a copy of the death certificate of the deceased worker. If formal proof is not available, the social security office will tell you what kinds of information will be acceptable.

WHAT DOES SOCIAL SECURITY OFFER?

The social security tax you pay gives you three different kinds of protection: (1) retirement benefits, (2) survivors' benefits, and (3) disability benefits.

Retirement benefits. A man becomes eligible for an old-age benefit at age 65, if he has retired under the definition in the law. A woman worker also is eligible for a full old-age benefit at 65, but she may retire at 62 and get 80% of her full benefit for the rest of her life. The closer she is to age 65 when she starts collecting her benefit, the larger the fraction of her full benefit she will get.

The amount of the old-age benefit you are entitled to is the key to all other benefits under the program. The old-age benefit is based on average monthly earnings, generally those after 1950. (Amounts over \$4,800 a year are not counted.) The table on the following page gives examples of benefits.

Using the table as a guide, you will see that average monthly earnings of \$300

would give you a benefit of \$105 a month when you retire at 65.

If your wife is also 65, then she will get a wife's benefit that is equal to half benefit. So if your benefit is \$105 a month, your wife gets \$52.50 (cents are rounded to the nearest dime).

If your wife is younger than you are, not under 62, she can draw a retirement benefit that depends on the number of months before she will be 65. If she is 62 when you retire, she will get her benefit when she is 62, she will get about ¾ of your basic benefit, or \$78.75 (She will get this amount for the rest of her life, unless you should die first; then she can start getting the full widow's benefit, described below.)

If your wife is entitled to a woman's old-age benefit on her own earnings, she can draw whichever—the worker's or wife's—is larger. No one can draw both benefits at the same time.

If you have children under 18 when you retire, they will get a benefit equal to your benefit, and so will your wife, in case, even if she is under 62. However, total benefits based on your earnings cannot be more than \$254.10 a month or of your average monthly wage. When children reach age 18, their benefits stop, except a benefit that is going to a child who is permanently and totally disabled. Such a child can continue to get a benefit as long as his disability meets the definition in the law.

If you are a woman worker entitled to an old-age benefit and you have a dependent husband aged 65 or over, he can draw a benefit similar to a wife's benefit at 65.

Survivor benefits. This feature of the social security program gives you valuable life insurance protection—in some cases over \$30,000 worth. The amount of protection is again geared to what the worker would be entitled to at 65. If you estimate from the table what your monthly benefit would be at 65, that's what your survivors would get:

1. A cash payment to cover your living expenses. This comes to 3 times the monthly benefit but no more than \$150 a month.

2. A benefit for each child under 18 who reaches 18. If there is only one child eligible, he gets 75% of the basic benefit. If there are two or more children, each one gets 50% of the basic benefit and an additional 25% is split among them. A disabled child can continue to get a benefit after age 18.)

3. A mother's benefit for your wife if she has children under 18 in her household. Her benefit is 75% of the basic benefit. She can collect this until the youngest child reaches 18. Payments stop then.

What Benefits You Get Under Social Security

	Retirement benefits			Survivors' benefits		
	Worker's monthly benefit ¹	Worker with 62-year-old wife ¹	Worker with 65-year-old wife ¹	Widow and 1 child	Widow and 2 children	Widow age 62 ²
.....	\$ 59.00	\$ 79.70	\$ 88.50	\$ 88.60	\$ 88.60	\$ 44.30
.....	73.00	98.60	109.50	109.50	120.00	54.80
.....	84.00	114.40	126.00	126.00	161.60	63.00
.....	95.00	128.90	142.50	142.50	190.10	71.30
.....	105.00	141.80	157.50	157.50	210.20	78.80
.....	116.00	156.60	174.00	174.00	232.00	87.00
.....	127.00 ³	171.50 ³	190.50 ³	190.50 ³	254.10 ³	95.30 ³

ates amount worker aged 50-64 or worker and wife (aged 62 or 65) would get if disabled. ² Also indi-
t that would be paid to only child or parent. ³ These are maximum benefits under the new law of 1958,
not be payable for several years to come; that is, to receive maximum benefits, the average salary of
excluding the lowest 5 years, would have to be \$4,800, starting Jan. 1, 1959.

again when she is 62). If she
abled child in her care who is
benefit after 18, then her benefit
too.

family benefits cannot go over
month or 80% of your average
wage.

re are no children under 18, your
get a widow's benefit starting at
his would come to 75% of the
fit.

ndent parents can sometimes col-
vivors' benefits, if the deceased
ves no wife or child. They are
eligible if: (a) they were getting
if their support from the de-
ker when he died, (b) they have
tirement age (65 for the father,
mother), and (c) they are not
r an old-age benefit based on
earnings. Each parent would
5% of the basic benefit.

n worker can provide survivors'
r any of these dependents, if
een contributing at least half
ort: (1) her children under age
t disabled child after 18, if the
married and was disabled be-
ad (3) her dependent widowed
t age 65, if he hasn't remarried.
had no other dependents, her
uld collect benefits if they met
a paragraph (5) above.

n example of survivors' benefits
ily situation: John Jones dies,
wife and two children aged one
His average monthly wage was
would have given him an old-
of \$105, if he had lived to 65.
at his family gets: (1) a cash
ment of \$255; (2) a total
enefit of \$131.50 for the two
nd (3) a \$78.80 monthly bene-
Jones. Total benefits for the
e to \$210.30 a month while
children are under 18. When the
reaches 18 his benefits stop,
unger child's benefit is raised

to \$78.80 a month. Mrs. Jones and the
younger child then collect a total of
\$157.50 a month for two years until the
child reaches 18. Then all payments stop.
When Mrs. Jones becomes 62 (assuming
she hasn't remarried), she will again be
paid \$78.80 a month.

Disability benefits. These are a new
feature of the social security insurance
system. Disability benefits are paid to
two groups of people:

1. An insured worker with a total dis-
ability can collect his full old-age benefit
at age 50, instead of waiting until 65.
Under the new law of 1958, eligible de-
pendents of disabled workers will receive
the usual benefits. To be eligible for
disability benefits, a person must: (a) have
worked in employment (or self-employ-
ment) covered by social security for about
5 out of the 10 years before he became
disabled; (b) be suffering from a physical
or mental disability of indefinite duration;
and (c) be so disabled that he can't work,
or at least "engage in any substantial
gainful activity." If he meets those tests,
his benefits will start after a 6-month
waiting period.

The applicant is referred to the State
vocational rehabilitation agency and, if
rehabilitation services are proposed and
the applicant refuses them without good
cause, his disability benefit is suspended.
If the worker gets workmen's compensa-
tion benefit or another federal benefit
based on disability, his disability benefit
is reduced by the amount of such benefit
—except that a benefit paid by the Vet-
erans Administration because of service-
connected disability will not result in any
reduction.

2. The permanently disabled child of a
deceased or retired person who was cov-
ered by social security can collect benefits
after age 18 (when children's benefits are
ordinarily cut off). If the child is eligible,
his mother can also get a benefit. The
child must: (a) have been disabled before
age 18 (but he need not have been draw-

ing benefits before 18), (b) be unmarried, and (c) have been dependent on the deceased or retired worker for at least half his support. The child's benefit would be 75% of the father's basic benefit and his mother would get the same amount. A disabled child can get a benefit based on his mother's earnings, instead of his father's, if she has contributed to at least half his support and has died or is drawing an old-age benefit.

The disabled child's benefit can actually be paid to adults, if the above tests are met. For example, an unmarried person, aged 40, who was born blind and is dependent on his father for support can collect a disabled child's benefit as soon as his father starts drawing an old-age benefit or dies.

YOU CAN EARN INCOME WITHOUT LOSING BENEFITS

If you are 72 or over, you can earn any amount. If you are under 72, you can earn \$1,200 a year without losing any benefits. (Only earned income is counted, not pensions, dividends, etc.) For each \$80 (or fraction of \$80) over \$1,200, you can lose one month's benefit. For example, \$1,290 could cancel two months' benefits, and \$2,081 could mean loss of the whole year's benefits. But you will not lose the benefit for any month in which you did not work as an employee for \$100 or more and did not perform substantial services in self-employment. For example, if you earned \$3,000 in 3 months and were idle the rest of the year, you would lose only 3 months' benefits.

When a man and wife are drawing old-age benefits based on his earnings, the wife will lose her benefit in any month that the husband loses his. But if a widow with young children loses her benefits by working, the children will continue to get theirs.

If you earn over \$1,200 a year while drawing benefits (and are under 72), you must report those earnings.

HOW TO PROTECT MY SOCIAL SECURITY ACCOUNT

1. *Always show your social security card when you start a new job.* In that way you will be sure that your earnings will be credited to *your* social security account and not someone else's. If you lose your social security card, apply for a new one. When a woman marries, she should apply for a new card showing her married name.

2. *Make a periodic check of earnings credited to your social security account.* You can do this by mailing postcard Form OAR-7004 to the Social Security Adminis-

tration, Baltimore, Md. (You can get form at any social security office.) reply will show total wages credited to your account since 1936 or when started working. It's a good idea to check once every three years and prevent errors.

3. *If you should become permanently disabled, have your social security card "frozen."* Social security benefits are actually based on your average earnings during the period of death or retirement. A long period of sickness or disability will lower your average earnings and thus cut down or even eliminate the eventual benefit you or your family might get. But you can avoid this reduction in benefit by applying for a disability determination at your local social security office. Then the period of disability will not be counted.

PUBLIC ASSISTANCE

Aid to four groups of needy persons is provided under the Social Security Act through assistance programs administered by the states with grants from the Federal government. The Federal share of the individual payment, for the aged, the blind, and the disabled is 4/5 of the first \$16 of the average monthly payment plus half the balance, up to the \$65 maximum specified in the law. A blind person may earn \$50 a month and have such earnings disregarded when the state is determining whether he is needy. For aid to dependent children, the Federal government pays 14/17 of the first \$17 paid per person plus 1/2 the balance within the maximums (\$32 for one needy adult for the first child, and \$23 for each additional child). To be eligible a child must be (1) under 18; (2) without parental support or care because of the death, absence from the home, or incapacity of a parent; and (3) living with a parent or steprelative.

The law also permits federal sharing of the payments to doctors and other medical care in behalf of needy persons beyond what such persons get directly from their assistance payment.

Unemployment Insurance

Unemployment insurance is managed jointly by the states and the national government. Most states began paying benefits in 1938 and 1939.

UNDER WHAT CONDITIONS CAN THE WORKER COLLECT

The laws vary from state to state. In general, a waiting period of one week is required before collecting unemployment insurance; the worker must be able to work, must not have quit without good cause or have been discharged for misconduct; he must not be involved

State Unemployment Compensation Maximums¹

Source: U. S. Department of Labor, Bureau of Employment Security.

State	Weekly benefit ²	Duration (in weeks)	State	Weekly benefit ²	Duration (in weeks)
.....	\$28 ¹	20	Montana.....	\$32	22
.....	45	26	Nebraska.....	34	26
.....	35	26	Nevada.....	37.50	26
.....	30	26	New Hampshire.....	38	26
.....	55	26-39 ⁴	New Jersey.....	35	26
.....	43 ³	32½	New Mexico.....	36	30
.....	45	26-39 ⁴	New York.....	50	26
.....	40	26	North Carolina.....	32	26-34 ⁴
.....	30	26	North Dakota.....	32	24
.....	33	26	Ohio.....	42	26
.....	35	26	Oklahoma.....	32	39
.....	45	26	Oregon.....	40	26
.....	40	26-39 ⁴	Pennsylvania.....	40	30
.....	32	26-39 ⁴	Rhode Island.....	36	26
.....	36	26	South Carolina.....	26	22
.....	30	26	South Dakota.....	33	24
.....	41	26	Tennessee.....	32	22
.....	37	26	Texas.....	28	24
.....	35	28	Utah.....	40	36
.....	33	26	Vermont.....	36	26-39 ⁴
.....	35	26	Virginia.....	32	20
.....	40	30	Washington.....	42	30
.....	30	26	West Virginia.....	30	24
.....	38	26	Wisconsin.....	47	34
.....	30	26	Wyoming.....	44	26
.....	33	26	Puerto Rico.....	12	7

May 15, 1960. ² Excludes dependents' allowances. ³ Amount increased by 25% for certain claimants with no benefit experience record. ⁴ The higher figure applies only when unemployment in the state reaches specified duration.

ute; above all, he must be willing to accept a job in his field at prevailing wages. Other restrictions on payments for marriage, pregnancy or education.

employed worker must go to the nearest employment service office to register for work. If a suitable job is available in his field, he must accept it and stop his unemployment payments. If he moves out of his own state, he must register at his new residence; the nearest office he is now located will act as his agent for the other state, which pays his

INSURANCE FOR THE EMPLOYER?

Insurance is borne by the employer in all states and Alaska. Each State (excepted) has a sliding scale of rates. The standard rate is set at 2.7% of payroll in most states. But employers with records of steady employment (few layoffs) are rewarded with rates lower than the standard 2.7%. The rate for employers in 1956 was 1.5% and is payable on only the first \$3,000 of a worker's pay, except in Delaware, Oregon, and Rhode Island, where the limit is set at \$3,600, and in Alaska where the limit is \$4,200. Em-

ployees as well as employers pay a tax in Alabama (0.1%), New Jersey (¼ of 1%), and Alaska (½ of 1%).

Employers pay an additional unemployment tax to the Federal Government—0.3% of the \$3,000 paid to each employee. This money is returned to the states in the form of federal grants for administrative expenses of the program; any amounts over these costs, up to \$200 million, is put in a special loan fund on which the states may draw when their payment funds are low, and the rest of the excess is assigned to the states to supplement the grants for administrative costs.

Requirements vary from state to state, but all states cover firms having at least 4 employees for 20 weeks or more a year. In some states, firms with only one employee are covered. Certain classes of workers are specifically exempt under some or all state laws: farm workers, domestic workers, members of the employer's family, insurance agents on commission, workers in nonprofit organizations, student nurses, internes and casual labor.

Railroad Workers

These are covered by the Railroad Retirement Act, passed in 1935 and amended in 1937 and 1946. The social security provisions of this act are administered by the Railroad Retirement Board.

AMERICAN ECONOMY



ALTHOUGH WE account for only 6.2% of the world's population, we own almost 50% of its wealth. We make, grow, build, sell, buy, and use more goods and services than any other country in the world. Of our population of over 179 million persons, about 65 million are employed, and over 44 million are enrolled in our schools and colleges (1959). Each year we spend more than \$300 billion on personal goods and services, of which \$88 billion go for food, tobacco, and alcohol alone. According to the American Automobile Association we spend \$25 billion on vacations every year. Our personal savings amount to over \$23 billion annually, in addition to

which 4 out of every 5 families are covered by life insurance. Of our 50 million dwelling units, 55% are occupied by owners. The millions of acres of farmland produce more food than we eat. Our productive capacity is the best in the world: we own 29% of the world's railroad mileage, 68% of its automobiles, 51% of its trucks, 52% of its radios, 44% of its electric power, and 37% of its steel. Our natural resources are tremendous: each year we produce about 29% of the world's output of petroleum, about 29% of its coal. Our merchant ships have outstripped Britain's, and we have the greatest volume of foreign trade.

Gross National Product or Expenditure (in millions of dollars)

Source: U. S. Department of Commerce.

Item	1929	1933	1938	1945	1948	1951	1959
Gross national product.....	104,436	55,964	85,227	213,558	259,426	328,975	\$479,500
GNP in constant (1954) dollars.....	181,944	126,606	174,965	314,044	297,205	341,965	433,100
Personal consumption expenditures.....	78,952	46,392	64,641	121,699	178,313	209,805	311,600
Durable goods.....	9,212	3,469	5,686	8,105	22,723	29,471	43,000
Nondurable goods.....	37,677	22,251	33,985	73,222	98,737	110,135	147,900
Services.....	32,063	20,672	24,970	40,372	56,853	70,199	120,700
Gross private domestic investment.....	16,231	1,391	6,661	10,430	43,087	56,334	70,850
New construction.....	8,707	1,431	3,960	3,833	19,454	24,811	40,250
Producers' durable equipment.....	5,850	1,589	3,644	7,654	18,925	21,290	26,100
Change in business inventories.....	1,674	-1,629	-943	-1,057	4,708	10,233	4,500
Net foreign investment.....	771	150	1,109	-1,438	1,929	229	-2,400
Government purchases.....	8,482	8,031	12,816	82,867	36,097	62,607	97,725
Federal.....	1,311	2,018	5,280	75,923	20,867	40,915	53,500
National security.....	1,344	2,022	5,286	.....	15,832	37,180	45,800
Other.....					5,570	4,154	7,700
Less: Government sales.....	33	4	6	2,158	535	419	.....
State and local.....	7,171	6,013	7,536	8,071	15,230	21,692	44,250

* Second quarter. † Less government sales.

National Income by Distributive Shares (in millions of dollars)

Source: U. S. Department of Commerce.

Type of share	1929	1933	1939	1945	1948	1951	1953	1959
National income.....	87,814	40,159	72,753	181,248	223,487	279,313	305,573	398,520
Compensation of employees.....	51,085	29,539	48,108	123,181	140,969	180,327	208,812	277,420
Wages and salaries.....	50,423	28,997	45,941	117,577	135,214	170,788	198,030	257,820
Supplements to wages and salaries.....	662	542	2,167	5,604	5,755	9,539	10,782	19,600
Income of unincorporated enterprises and inventory valuation adjustment.....	14,759	5,599	11,610	30,835	40,194	42,329	40,723	46,320
Business and professional.....	8,791	3,166	7,293	19,011	22,405	25,995	27,445	34,520
Farm.....	5,968	2,433	4,317	11,824	17,789	16,334	13,278	11,800
Rental income of persons.....	5,425	1,971	2,742	5,634	7,297	9,431	10,528	12,000
Corporate profits and inventory valuation adjustment.....	10,100	-1,992	5,689	18,413	30,848	40,954	37,314	47,170
Net interest.....	6,445	5,042	4,604	3,185	4,179	6,272	8,196	15,600

How Consumers Spend Their Dollar

Source: U. S. Department of Commerce.

Group	(in millions of dollars)									1959
	1929	1932	1939	1945	1947	1949	1953	1958	1959	% of total
tobacco.....	21,374	12,719	21,072	45,924	58,274	58,384	70,606	83,200	85,200	27.2
cessories, and jewelry.....	11,018	5,973	8,299	20,247	22,952	23,451	26,668	31,000	33,000	10.5
re.....	1,116	817	1,004	2,077	2,253	2,324	2,973	4,400	4,700	1.5
.....	11,421	8,964	8,940	12,205	15,567	19,295	27,485	38,000	40,500	12.9
operation.....	10,509	6,675	9,461	14,865	23,949	25,651	32,275	41,300	43,900	14.0
re and death expenses.....	3,620	2,575	3,386	5,902	7,685	9,003	12,200	18,100	19,700	6.3
business.....	5,221	3,111	3,725	4,787	5,707	7,015	10,783	16,700	18,600	5.9
ion.....	7,496	3,924	6,250	6,694	15,390	20,864	29,619	33,700	38,900	12.4
.....	4,327	2,439	3,446	6,314	9,352	10,122	12,892	16,800	18,300	5.8
ication and research.....	664	571	628	871	1,411	1,683	2,244	3,600	3,900	1.2
nd welfare activities.....	1,196	973	938	1,572	2,032	2,235	2,778	4,000	4,300	1.4
vel and remittances—net....	799	467	317	1,621	837	1,131	2,126	2,600	2,800	0.9
ersonal consumption										
nditures.....	78,761	49,208	67,466	123,079	165,409	181,158	232,649	293,500	313,800	100.0

Consumers' Price Index (1947-49 = 100)

Source: U. S. Bureau of Labor Statistics.

Items	1947	1948	1951	1953	1959	1960*
	95.5	102.8	111.0	114.4	124.6	125.6
	95.9	104.1	112.6	112.8	118.3	117.4
	97.1	103.5	106.9	104.8	107.9	108.4
	95.0	101.7	112.4	117.7	129.2	131.2
	94.4	100.7	113.1	124.1	139.7	141.0
lectricity	97.6	100.0	103.1	106.6	119.9	124.0
s and fuel oil	88.8	104.4	116.4	123.9	136.6	139.0
ishings	97.2	103.2	111.2	107.9	103.9	104.3
operation	97.2	102.6	109.0	115.3	134.3	136.3
on	90.6	100.9	118.4	129.7	146.3	147.9
	94.9	100.9	111.1	121.3	150.8	154.7
e	97.6	101.3	110.5	112.8	131.2	132.6
recreation	95.5	100.4	106.5	108.0	118.6	120.6
and services	96.1	100.5	109.7	118.2	129.7	131.8

y.

Consumption of Principal Foods*

(in pounds per capita)

Source: U. S. Department of Agriculture.

Foods	1935-39 avg.	1947-49 avg.	1960 ^a
	127.0	148.5	159.0
	15.6	22.0	34.9
	300.0	385.0	324.0
d cream	330.0	359.0	342.0
	5.6	7.0	8.0
ishings	17.0	10.6	8.0
	2.9	5.6	9.3
	29.3	29.3	32.0
	139.0	132.2	100.0
its ⁴	25.5	41.9	45.4
oles	140.2	147.8	126.0
etables ⁴	30.5	42.1	53.6
etpotatoes	151.6	126.6	109.0
	97.4	95.1	98.0
	37.8	33.1	31.7
	160.0	137.0	118.0
	14.0	18.2	16.3
	4.4	4.1	4.2

Consumer Credit

(in millions of dollars)

Source: Federal Reserve Board.

End of year	Total	Install- ment credit	Non- installment credit*	Charge accounts
1929	6,444	3,151	1,691	1,602
1932	3,567	1,521	1,026	1,020
1935	4,911	2,694	1,034	1,183
1939	7,222	4,503	1,305	1,414
1940	8,338	5,514	1,353	1,471
1943	4,901	2,136	1,325	1,440
1946	8,384	4,172	2,136	2,076
1949	17,305	11,590	2,920	2,795
1950	21,395	14,703	3,401	3,291
1953	31,393	23,005	4,114	4,274
1955	38,882	28,958	5,129	4,795
1956	42,511	31,897	5,619	4,995
1958	45,586	34,080	6,446	5,060
1959 [§]	52,046	39,482	7,213	5,351
1960 [†]	51,021	39,408	7,308	4,305

not pounds. * Excludes butter and margarine. † Includes data for Alaska and Hawaii, beginning with Jan. and Aug. 1959.

not pounds. * Excludes butter and margarine. † Includes data for Alaska and Hawaii, beginning with Jan. and Aug. 1959.

Minutes of Working Time Required for Purchase of Selected Consumer Items in 1957

Source: National Conference Industrial Board.

Food	U. S.	Austria	Belgium	Sweden	France	West Germany	Italy	U. K.	Canada	Mexico	Japan	Australia
Flour, wheat (1 kg.).....	7	27	36	13	34	21	39	15	7	30	41	10
Rice (1 kg.).....	11	36	40	24	53	28	52	31	...	51	64	17
Bread, white (1 kg.).....	12	43	18	22	20	28	38	13	12	47	58	11
Beef, sirloin ¹ (1 kg.).....	61	265	296	149	326	142	387	116	70	168	356	65
Pork, loin chops (1 kg.).....	56	204	220	93	190	160	...	113	61	229	346	87
Fish, fresh (1 kg.).....	27	130	143	46	71	67	328	59	31	181	81	110
Butter (1 kg.).....	45 ^b	211	230	93	283	197	342	88	56	323	576	80
Milk, pasteurized (1 liter)...	8 ^c	14	18	8	16	12	25	14	8	25	59	12
Eggs, fresh (one).....	2 ^b	8	7	4	10	7	11	4	2	11	10	3
Apples, eating (1 kg.).....	8	59	29	30	86	46	54	32	11	90	...	...
Cabbage (1 kg.).....	5	14	10	6	15	9	...	9	6	30	18	...
Potatoes (1 kg.).....	4	6	6	6	8	6	14	7	3	20	17	7
Coffee (1 kg.).....	61	519	309	174	351	557	658	217	78	256	...	195
Tea (1 kg.).....	94 ^d	710	679	339	973	868	842	178	99	2,088	272	108
Oleomargarine (1 kg.).....	19	84	59	44	97	57	...	46	28	168	246	49
Sugar (1 kg.).....	7 ^b	38	34	16	34	33	71	15	10	25	115	15
Cigarettes (20).....	7 ^b	28	20	33 ^d	33	46	46 ^d	46	13	10	45	23
Electricity (1 kwh.).....	2	3	9	2	9	6	12	2	1	7	9	1
Coal (100 kg.).....	90	723	509	...	660	213	1,332	174	107	76	850	...

¹ Boneless. ² Estimated. ³ Weighted average of 5 cities. ⁴ Home produced. ⁵ August 1959.

New Construction Activity, by Type (in millions of dollars)

Source: U. S. Department of Commerce and U. S. Department of Labor.

Activity	1929	1933	1940	1945	1949	1957
Total new construction activity.....	10,793	2,879	8,682	5,633	22,789	48,115
New private construction activity.....	8,307	1,231	5,504	3,235	16,384	33,988
Residential (nonfarm).....	3,625	470	2,985	1,100	8,267	17,019
New dwelling units.....	3,040	290	2,560	720	7,257	12,615
Additions and alterations.....	340	145	335	340	825	3,903
Nonhousekeeping.....	245	35	90	40	185	501
Nonresidential building, except farm and public utility ..	2,694	406	1,025	1,020	3,228	9,556
Industrial.....	949	176	442	642	972	3,557
Commercial ¹	1,135	130	348	203	1,027	3,564
Other.....	610	100	235	175	1,229	2,435
Public utility.....	1,578	261	771	827	3,323	5,624
Railroad.....	510	94	167	264	352	406
Telephone and telegraph.....	354	45	122	117	533	1,068
Other public utility.....	714	115	482	446	2,438	4,150
Farm construction.....	307	49	240	267	1,488	1,590
All other private.....	103	45	33	21	78	199
New public construction activity.....	2,486	1,648	3,628	2,398	6,405	14,127
Residential.....	...	...	200	80	359	506
Nonresidential building.....	659	230	615	937	2,068	4,503
Industrial.....	...	2	164	755	177	473
Educational.....	389	52	156	59	934	2,825
Hospital and institutional.....	101	49	54	85	477	350
Other.....	169	127	241	38	480	855
Military and Naval.....	19	36	385	690	137	1,322
Highway.....	1,266	847	1,302	398	2,131	4,971
Sewer and water.....	253	95	338	97	619	1,344
Conservation and development.....	115	359	528	130	793	971
All other ²	23	16	260	66	298	117

¹ Warehouses, office and loft buildings; stores, restaurants and garages. ² Miscellaneous public enterprises and all Federal not included elsewhere.

Number of Nonfarm Houses Built*

U. S. Bureau of Labor Statistics, National
Bureau of Economic Research.

Houses	Year	Houses
204,000	1944	169,000
475,000	1949	1,025,100
247,000	1950	1,396,000
509,000	1952	1,127,000
93,000	1953	1,103,800
336,000	1957	1,041,900
515,000	1958†	1,209,900
350,000	1959	1,378,500

† represent new dwelling units started. † Pre-

Monthly Average Railroad Carloadings
(in thousands of cars)

Source: Association of American Railroads.

Year	Total	Year	Total
1920	3,760	1947	3,708
1925	4,269	1948	3,643
1929	4,402	1949	2,992
1932	2,348	1950	3,242
1939	2,826	1951	3,437
1940	3,030	1952	3,165
1942	3,564	1953	3,192
1943	3,535	1957	2,963
1944	3,617	1958	2,517
1945	3,492	1959	2,581

Industrial Production Indexes, by Groups
(1947-49 average = 100)

Source: Board of Governors of the Federal Reserve System.

Industry	1950	1958	1959	1960*	Industry	1950	1958	1959	1960*
Manufactures	116	141	165	178	Leather and products	101	109	119	119
Metals	114	94	108	141	Paper and allied products	118	155	170	173
Nonmetallic minerals	116				Printing and publishing	111	133	143	148
Metal products	115	125	142	149	Chemicals and allied products	121	210	240	246
Transportation equipment	114	140	169	178	Petroleum and coal products	110	148	158	152
Electric, electronic, and related	120	197	228	250	Food and beverage products	103	123	128	130
Textile mill and glass products	114	175	209	218	Tobacco manufactures	101	121	127	129
Chemical and allied products	113	110	124	127	Total manufactures	113	139	158	166
Nonmetallic mineral products and misc.	117	126	147	151	Minerals	105	120	125	125
Manufactures	111	141	155	157	Fuels	103	117	122	120
Nonmetallic mineral products	111	109	126	124	Stone & earth minerals	111	171	188	182
Chemical and allied products	108	129	152	155	Total industrial production	112	141	159	166
Nonmetallic mineral products	119	166	199	205					

* of first 3 months.

Electric Energy Output of Utilities*

(in millions of kilowatt hours)

Source: Federal Power Commission.

Total	Ownership						Source of energy	
	Privately owned	Publicly owned	Municipal	Federal	Co-operatives, power districts, state projects	% Public to total	Fuels	Fuels as % of total
39,405	37,716	1,689	1,373	58	94	4.3	23,644	60.0
92,180	87,514	4,667	3,498	300	451	5.1	59,533	64.6
81,740	76,668	5,072	3,583	458	654	6.2	48,283	59.1
127,642	115,078	12,564	5,688	5,476	944	9.8	84,078	65.9
217,759	180,247	37,511	9,223	24,485	3,156	17.2	144,127	66.2
370,673	301,845	68,828	17,617	44,120	6,204	18.6	270,922	73.1
442,665	354,273	88,393	21,625	58,064	8,704	20.0	337,431	76.2
600,668	459,015	141,653	28,006	100,711	12,937	23.6	478,639	79.7
645,098	490,402	154,696	28,329	110,437	15,930	24.0	504,836	78.3
709,700	544,024	165,676	34,597	109,062	22,017	23.3	571,993	80.6

* by industrial establishments was as follows (in millions of kilowatt hours): 1939—33,667; 1943—49,781; 1945—60,668; 1953—71,505; 1955—81,972; 1956—84,136; 1958—79,654; 1959 preliminary—84,808. † Preliminary.

Fuel Production

Source: U. S. Dept. of Interior, U. S. Dept. of Commerce, and American Gas Association.

Year	Coke, in thousands of short tons	Anthracite coal, in thousands of short tons	Bituminous coal, in thousands of short tons	Natural gas, in millions of therms (produced and marketed) ¹	Manufactured gas, in millions of therms ²	Crude petroleum, in thousands of 42-gal. bbl.
1929.....	59,884	73,828	534,989	20,490 ³	2,070 ³	1,007
1933.....	27,589	49,541	333,631	16,640 ³	1,820	905
1939.....	44,327	51,487	394,855	26,220	1,830	1,234
1941.....	65,187	56,368	514,149	29,780	1,990	1,402
1945.....	67,308	54,934	577,617	41,960	2,600	1,713
1949.....	63,637	42,702	437,868	55,770	2,680	1,841
1951.....	79,331	42,670	533,645	76,660	2,435	2,244
1956.....	81,498	28,578	500,505	108,381	1,434	2,617
1957.....	82,464	25,476	489,996	114,810	1,167	2,616
1958.....	59,037	21,856	400,090	118,575	1,086	2,448
1959.....	63,112	19,548	406,870	123,372	955	2,572

¹ Includes all natural gas in sales of natural gas mixed with manufactured gas. ² Includes all manufactured gas products produced and purchased by gas utilities. ³ Estimated.

Metals Production (in short tons)

Source: American Iron & Steel Institute, *Iron Age*, American Zinc Institute, American Bureau of Metal Statistics and U. S. Bureau of Mines.

Year	Rolled iron and steel products				Aluminum (primary)	Copper (smelter output from domestic ore)	Zinc (slab smelter output, all grades)*	Miscellaneous products of ferrous metals
	Pig iron and ferroalloys	Steel ingots and castings	Total	Plates and sheets				
1929.....	47,727,661	63,205,490	45,997,746	13,928,670	113,986	1,001,432	631,601	670
1932.....	9,835,227	15,322,901	11,705,219	3,956,505	52,444	272,005	213,531	255
1939.....	35,677,097	52,798,714	39,067,553	13,931,919	163,545	712,675	538,198	420
1941.....	56,686,604	82,839,259	62,324,187	20,293,071	309,067	966,072	863,955	470
1943.....	62,769,947	88,836,512	63,292,673	22,543,040	920,179	1,092,939	971,873	406
1945.....	54,919,029	79,701,648	59,811,669	19,314,316	495,060	722,894	799,520	356
1948.....	61,911,559	88,640,470	69,191,952	25,694,480	623,456	834,813	850,105	339
1949.....	54,916,785	77,978,176	60,882,387	23,470,886	603,462	752,750	870,113	404
1951.....	72,448,543	105,199,848	81,911,320	31,869,683	836,881	928,330	931,833	342
1952.....	63,353,955	93,168,039	71,348,528	27,251,852	937,331	925,359	961,430	383
1953.....	77,250,168	111,609,719	85,943,724	35,699,732	1,252,013	926,448	971,191	328
1954.....	59,806,242	88,311,652	68,464,640	28,406,447	1,460,565	835,472	868,242	322
1957.....	79,339,671	112,714,996	85,886,891	35,575,848	1,647,698	1,076,928	1,057,452	338
1958.....	57,764,100	85,254,885	65,105,455	29,683,253	1,564,341	1,001,615	781,664	265
1959.....	60,774,738	93,446,132	71,855,811	33,858,651	1,771,200	996,700	801,720	345

* From 1940 includes both foreign and domestic ores.

Business Population (in thousands of concerns)

Source: U. S. Department of Commerce, Dun & Bradstreet.

Item	1929	1933	1941	1943	1946	1949	1953	1958	1959
Total operating businesses ¹	3,029	2,782	3,276	3,030	3,242	3,984	4,188	4,533	4,583
Manufacturing.....	257	167	230	243	264	323	331	329	323
Wholesale trade.....	148	142	190	182	210	260	283	309	312
Retail trade.....	1,327	1,291	1,561	1,401	1,458	1,783	1,846	1,955	1,977
Service industries.....	591	575	615	579	614	739	750	828	848
Contract construction.....	234	185	194	164	199	339	405	466	464
All other ²	472	422	486	460	498	539	573	647	658
New Entrants ³	(³)	(³)	290	146	617	331	352	397	423
Discontinued businesses ⁴	(³)	(³)	271	337	209	307	299	347	347
Commercial and industrial failures ⁵	22.9	19.9	11.8	3.2	1.1	9.2	8.9	15.0	14.1

¹ 1929-33, annual average; 1941-60, as of Jan. 1. ² Annual total. ³ Not available. ⁴ Closures resulting from known loss to creditors. ⁵ Includes transportation, communications, public utilities, finance, insurance, real estate and mining and quarrying. ⁶ Preliminary.

Consumer Durable Goods Output

Electrical Merchandising Week; Electronic Industries Association; Automobile Manufacturers Association, Inc.

Electric clothes washers		Standard electric ranges		Electric vacuum cleaners		Electric refrigerators		Radio sets		Television sets		Passenger cars	
Number sold, in thou-	Average retail price	Number sold, in thou-	Average retail price	Number sold, in thou-	Average retail price	Number sold, in thou-	Average retail price	Output in thou-	Average retail price ³	Output in thou-	Average retail price ³	Factory sales, in thou-	Average factory price
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	\$1,229
3 ¹	\$ 75 ¹	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181	1,190
600	120	40	.....	1,024	\$50	5 ²	\$550 ²	.....	.....	.....	.....	1,906	949
736	141	85	\$176	1,056	62	75	425	.....	.....	.....	.....	3,735	658
956	113	173	165	1,253	50	778	292	.....	.....	.....	.....	4,455	621
570	59	60	150	447	40	798	195	2,446	\$47	.....	.....	1,104	545
1,465	72	405	134	1,210	56	2,310	171	8,083	56	.....	.....	3,929	573
1,892	79	728	142	1,670	56	3,500	155	13,642	35	.....	.....	3,780	679
2,047	121	577	186	2,290	68	2,100	207	15,955	50	.....	.....	2,149	921
4,196	173	1,600	235	3,361	77	4,766	260	16,500	52	975	\$393	3,909	1,220
3,065	171	1,056	230	2,890	77	4,450	255	11,400	42	3,000	323	5,119	.....
4,273	184	1,830	233	3,529	79	6,200	258	13,468	44	7,464	300	6,666	.....
3,267	217	1,400	245	2,842	92	4,075	275	10,431	34	6,096	308	4,321	.....
4,391	235	1,600	263	3,330	88	4,025	315	14,133	32	7,575	231	7,920	.....
3,770	248	810	255	3,295	89	3,117	320	11,747	32	4,920	205	4,258	.....
4,010	249	930	260	3,425	92	3,750	336	15,622	31	6,270	213	5,591	.....

¹ 1921. ² Average retail prices not supplied by Electronic Industries Association.

Wood Pulp, Paper and Lumber

U. S. Bureau of the Census and National Lumber Manufacturers Assn.

Wood pulp (in thousands of short tons)	Paper and paperboard (in thousands of short tons)	Lumber (in millions of board feet)
3,518	6,098	34,552
4,863	11,140	36,886
6,993	13,510	25,148
10,011	17,934	33,613
9,060	17,036	34,289
10,167	17,371	28,122
11,946	21,114	35,404
12,872	21,897	36,762
12,207	20,315	32,901
14,849	24,375	38,902
16,473	24,418	37,462
20,829	29,892	39,108†
21,808	30,696	33,396
21,614	30,229	33,275
24,155	34,020	36,530

revision for paper and paperboard increased in 1941.

Expenditures for New Plant and Equipment*

(in millions of dollars)

Source: Securities and Exchange Commission and
U. S. Department of Commerce.

Year	Manufacturing and mining	Transportation	All other†	Total
1939.....	2,269	645	2,598	5,512
1945.....	4,366	1,122	3,204	8,692
1946.....	7,217	1,506	6,125	14,848
1947.....	9,394	2,187	9,031	20,612
1948.....	10,016	2,604	9,439	22,059
1949.....	7,941	2,239	9,105	19,285
1950.....	8,198	2,323	10,084	20,605
1952.....	12,617	2,896	10,980	26,493
1957.....	17,200	3,680	16,620	36,900
1958.....	12,375	2,254	15,897	30,526
1959.....	13,044	2,978	16,619	32,641
1960.....	13,048	2,924	15,180	31,152

* Data exclude agriculture. † Includes electric and gas utilities, trade, service, communications, construction and finance. ‡ First 6 months, estimated.

Industrial Production Indexes for Western Europe

Source: United Nations.

(1953 = 100)

Country	1948	1950	1955	1959
Italy.....	54	86	133	156
.....	88	90	116	119
.....	82	98	112	135
.....	81	88	121	159
d. Rep.)..	40	72	129	162
.....	52	78	130	167
.....	70	91	107	114

Country	1948	1950	1955	1959
Italy.....	62	79	118	158
Luxembourg.....	91	92	116	127
Netherlands.....	71	88	118	138
Norway.....	70	87	117	130
Sweden.....	90	97	111	121
United Kingdom....	83	94	113	120
U.S.S.R.....	45	...	128	191

Employment and Unemployment (in millions of persons)

Sources: U. S. Bureau of Labor Statistics, U. S. Bureau of the Census, and U. S. Bureau of Agricultural Economics

Activity	1929	1932	1941	1943	1945	1950	1957	1959
Total employment	46.7	37.9	50.4	54.5	52.8	60.0	65.0	65.6
Non-agricultural employment	36.8	26.3	41.3	45.4	44.2	52.5	58.8	59.7
Manufacturing	10.5	6.8	13.0	17.4	15.2	14.9	16.8	16.2
Durable goods	...	...	...	6.5	6.3	8.0	9.8	9.3
Nondurable goods	...	...	...	10.9	8.9	6.9	7.0	6.9
Mining	1.1	0.7	.9	.9	.8	.9	0.8	0.7
Construction	1.5	1.0	1.8	1.6	1.1	2.3	3.0	2.7
Transportation and public utilities	3.9	2.8	3.2	3.6	3.9	4.0	4.2	3.9
Trade	6.4	4.9	7.6	7.3	7.7	9.5	11.5	11.4
Retail	...	...	...	5.7	5.9	7.0	8.4	8.3
Wholesale	...	...	...	1.6	1.8	2.5	3.1	3.1
Finance	1.4	1.3	1.5	1.4	1.4	1.8	2.3	2.4
Service	3.1	2.7	3.6	3.8	3.9	4.8	6.5	6.5
Government	3.1	3.2	4.6	6.0	6.0	5.9	7.4	8.1
Other, self-employed, domestic	6.9	5.1	5.1	3.4	4.2	8.4	(9)	(9)
Agricultural employment	9.9	9.6	9.1	9.1	8.6	7.5	6.2	5.9
Unemployment	2.0	12.7	5.5	1.1	1.1	3.1	2.9	3.8
Total civilian labor force	48.7	50.6	55.9	55.5	53.9	63.1	67.9	69.4
Armed forces	.3	.3	1.5	8.9	11.3	1.5	2.8	2.5
Total labor force	49.0	50.9	57.4 ²	64.4	65.2	64.6	70.7	71.9

¹ Feb. ² Includes 1.9 million employed in public works. ³ Included in services, transportation and public utility and retail trade.

Average Earnings and Hours Worked Per Week in Manufacturing Industries

Source: U. S. Department of Labor.

Industry	1947		1949		1951		1953		1958		1960 ¹
	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings
All manufacturing ¹	\$54.14	40.1	\$54.92	39.2	\$64.71	40.7	\$71.69	40.5	\$ 83.56	39.2	\$ 92.29
Durable goods	57.11	40.5	58.03	39.5	69.47	41.6	77.23	41.3	90.23	39.6	100.86
Primary metal industries	61.03	40.1	60.78	38.3	75.12	41.5	84.25	40.9	101.16	38.1	117.67
Iron and steel foundries	58.45	40.7	55.09	37.2	71.66	42.4	76.33	40.6	86.00	37.3	100.19
Nonferrous foundries	59.96	40.0	60.92	39.0	73.74	41.9	80.97	41.1	92.81	39.6	...
Fabricated metal products	56.68	40.6	57.82	39.6	68.81	41.7	77.15	41.7	90.83	39.9	100.53
Hand tools	56.07	40.9	54.54	38.6	69.70	42.5	74.70	41.5	84.91	39.4	96.05
Hardware	54.26	40.4	56.28	39.3	66.49	41.3	75.89	41.7	89.37	40.1	96.05
Structural metal products	58.17	41.2	59.90	40.5	71.49	42.3	80.75	42.5	93.42	40.1	97.36
Electrical machinery	55.66	40.1	56.96	39.5	64.84	41.3	71.81	40.8	85.22	39.6	92.80
Machinery, except electrical	60.52	41.2	60.44	39.5	76.38	43.4	82.91	42.3	94.36	39.6	105.57
Transportation equipment	61.58	39.0	64.95	39.2	75.67	40.9	85.28	41.2	100.50	39.8	115.92
Automobiles	61.86	38.4	65.97	38.9	75.45	39.5	87.95	41.1	101.29	39.1	124.68
Lumber and wood products	51.38	41.5	51.72	40.6	59.98	40.8	65.93	40.7	75.01	39.8	77.62
Furniture & fixtures	48.99	41.1	49.48	40.1	57.27	41.2	63.14	41.0	70.21	39.5	74.93
Stone, clay and glass	53.46	40.9	54.45	39.8	63.91	41.5	70.35	40.9	84.60	40.0	90.90
Nondurable goods	50.61	39.6	51.41	38.8	58.46	39.5	63.60	39.5	75.76	38.8	80.77
Textile—mill products	45.59	39.2	44.83	37.7	51.60	38.8	53.57	39.1	56.56	38.6	64.48
Cotton, silk, synthetic fibers	44.36	39.4	42.89	37.2	50.70	39.3	51.09	39.3	55.16	38.5	...
Woolen and worsted goods	52.45	40.1	51.19	38.9	57.87	39.1	61.93	39.7	65.34	40.7	...
Apparel and other finished textiles	42.79	36.2	41.89	35.8	46.31	35.9	48.41	36.4	53.51	35.4	55.59
Leather	41.66	37.2	41.61	36.6	46.86	36.9	51.65	37.7	57.61	36.7	61.40
Food	51.87	42.0	53.58	41.5	59.92	41.9	66.33	41.2	81.55	40.6	88.51
Tobacco	36.50	38.1	37.25	37.1	43.51	38.5	47.37	38.2	62.51	39.1	65.70
Paper	55.25	42.8	55.96	41.7	65.51	43.1	72.67	43.0	88.49	41.9	95.20
Printing and publishing	66.73	39.3	70.28	38.7	77.21	38.8	85.58	38.9	97.97	37.8	104.94
Chemicals	56.23	41.5	58.63	41.0	67.81	41.6	75.58	41.3	94.59	40.9	102.09
Petroleum and natural gas	69.23	40.7	72.36	40.4	80.98	40.9	90.17	40.8	110.85	40.5	117.16
Rubber	56.78	39.0	57.79	38.3	68.61	40.6	77.78	40.3	92.38	39.3	102.16

¹ Average weekly earnings in 1919 = \$23.29, 1929 = \$26.40, 1932 = \$17.86, 1939 = \$24.23. Average hours worked per week in 1914 = 51.0, 1919 = 47.8, 1929 = 45.7, 1932 = 38.2, 1939 = 37.7. ² January.

Earnings and Hours Worked Per Week in Nonmanufacturing Industries

Source: U. S. Department of Labor.

Industry	1947		1949		1951		1955		1960	
	Earnings	Hours worked	Earnings	Hours worked	Earnings	Hours worked	Earnings	Hours worked	Earnings	Hours worked
mining.....	\$62.77	37.7	\$56.78	30.2	\$66.66	30.3	\$84.50	33.4	\$ 88.09	31.8
coal mining.....	66.59	40.7	63.28	32.6	77.79	35.2	96.26	37.6	126.67	38.5
is mining.....	54.63	41.8	61.55	40.9	74.56	43.6	92.42	42.2	113.05	42.5
and nonmetallic mining.....	50.54	45.0	56.38	43.3	67.05	45.0	80.99	44.5	91.74	41.7
.....	44.77	37.4	51.78	38.5	58.26	39.1	72.07	39.6	86.36	38.9
.....	53.56	44.6	62.85	44.7	68.24	44.6	78.54	42.0	95.30	41.8
electric utilities.....	56.69	41.9	63.99	41.5	72.49	41.9	86.52	41.2	108.24	41.0
trucks and busses.....	57.14	46.8	64.61	44.9	72.23	46.3	80.60	43.1	95.37	42.2
trade.....	51.99	41.0	57.55	40.7	64.31	40.7	77.55	40.6	91.43	40.1
.....	40.66	40.3	45.93	40.4	50.65	40.2	58.50	39.0	66.95	37.4
(round).....	29.36	45.2	32.84	44.2	35.42	43.2	41.09	41.5	48.40	40.0
.....	32.71	42.6	34.98	41.5	37.81	41.1	40.70	40.3	46.65	39.2
cleaning.....	38.30	41.9	40.71	41.2	43.99	41.5	47.40	39.5	53.24	38.3
building construction.....	63.13	37.6	70.95	36.7	81.47	37.2	96.30	36.1	103.97	34.2

State and Local Government Employment and Monthly Payroll: October 1959

Source: U. S. Department of Commerce.

Function	Employees (in thousands)	Payroll (in millions)	Function	Employees (in thousands)	Payroll (in millions)
actions.....	6,088	\$2,041.7	Hospitals.....	573	\$156.4
total.....	2,745	999.3	Police.....	326	119.4
ools.....	2,310	863.3	Local fire protection.....	209	60.5
s of higher learning.....	409	126.6	Natural resources.....	135	43.1
.....	26	9.3	Sanitation.....	146	47.8
.....	517	167.2	Local utilities, total.....	235	91.1
.....	116	36.6	General control.....	463	119.5
.....	79	27.0	All other.....	543	173.8

Why Strikes?

For issues	Percentage of total strikes			
	1949	1957	1958	1959
.....	46.6	47.1	50.8	50.5
ization, wages and	6.0	8.4	6.0	9.7
ization.....	15.7	12.0	9.8	8.2
.....	10.8	8.4	6.8	5.5
ing bargaining po-	.5	.5	.6	.5
.....	2.2	2.3	1.9	1.5
ity.....	1.8	.6	.2	.1
tion.....	.4	.2	.2	.5
g conditions.....	25.0	22.8	23.7	20.5
.....	12.6	10.9	11.7	10.5
tions and policies.....	9.7	9.4	9.7	8.7
.....	2.1	2.3	2.2	1.0
.....	.6	.1	.1	.3
intraunion matters	5.8	8.9	8.7	9.4
.....	1.4	1.7	1.6	1.4
y or factionalism.....	1.5	.7	.6	1.0
.....	2.6	6.3	6.3	6.9
.....	.3	.2	.2	.1
.....	.9	.8	1.1	1.6
.....	100.0	100.0	100.0	100.0

Strikes and Lockouts

Source: U. S. Bureau of Labor Statistics.

Year	Strikes and lockouts Number	Workers involved Number (thousands)	Man-days idle Number (thousands)
	Number	(thousands)	(thousands)
1885.....	695	258	n.a.
1890.....	1,897	373	n.a.
1895.....	1,255	407	n.a.
1900.....	1,839	568	n.a.
1905.....	2,186	302	n.a.
1915.....	1,593	n.a.	n.a.
1917.....	4,450	1,227	n.a.
1920.....	3,411	1,463	n.a.
1925.....	1,301	428	n.a.
1929.....	921	289	5,352
1930.....	637	183	3,317
1932.....	841	324	10,502
1933.....	1,695	1,168	16,872
1935.....	2,014	1,117	15,456
1939.....	2,613	1,171	17,812
1943.....	3,752	1,981	13,501
1945.....	4,750	3,470	38,025
1949.....	3,606	3,030	50,500
1952.....	5,117	3,540	59,100
1957.....	3,673	1,390	16,500
1958.....	3,025	2,065	23,550
1959.....	3,708	1,880	69,000

n.a. = not available.

Membership of Leading American Labor Unions, 1958

Source: Bureau of Labor Statistics, Directory of Labor Unions in the United States, 1959.

Name of Union	Affiliation	No. of Me
Amalgamated Association of Street, Electric Railway and Motor Coach Employees.....	AFL-CIO	124,63
Amalgamated Clothing Workers.....	AFL-CIO	376,00
Amalgamated Meat Cutters and Butcher Workmen.....	AFL-CIO	325,30
American Federation of Musicians.....	AFL-CIO	262,88
Bricklayers, Masons and Plasterers.....	AFL-CIO	159
Brotherhood of Locomotive Firemen and Enginemen.....	AFL-CIO	78
Brotherhood of Maintenance of Way Employees.....	AFL-CIO	183,1
Brotherhood of Painters, Decorators and Paperhangers.....	AFL-CIO	184,5
Brotherhood of Railroad Trainmen.....	AFL-CIO	200,11
Brotherhood of Railway and Steamship Clerks.....	AFL-CIO	360,85
Building Service Employees' International Union.....	AFL-CIO	260,00
Communications Workers of America.....	AFL-CIO	255,3
Hotel & Restaurant Employees' International Alliance.....	AFL-CIO	436,3
International Association of Bridge, Structural and Ornamental Iron Workers.....	AFL-CIO	152,36
International Association of Machinists.....	AFL-CIO	992,68
International Brotherhood of Boilermakers.....	AFL-CIO	132,35
International Brotherhood of Electrical Workers.....	AFL-CIO	750,00
International Brotherhood of Teamsters.....	Ind.	1,418,24
International Hod Carriers', Building and Common Laborers' Union.....	AFL-CIO	476,73
International Ladies' Garment Workers' Union.....	AFL-CIO	442,90
International Typographical Union.....	AFL-CIO	110,44
International Union of Mine, Mill and Smelter Workers.....	Ind.	100,00
International Union of Electrical, Radio and Machine Workers.....	AFL-CIO	278,28
National Association of Letter Carriers.....	AFL-CIO	110,00
National Federation of Post Office Clerks.....	AFL-CIO	160,00
Oil, Chemical and Atomic Workers.....	AFL-CIO	180,17
Retail, Wholesale and Department Store Union.....	AFL-CIO	160,00
State, County and Municipal Employees.....	AFL-CIO	200,00
Textile Workers Union.....	AFL-CIO	197,20
Transport Workers Union.....	AFL-CIO	135,00
United Association of Plumbers and Steam Fitters.....	AFL-CIO	255,80
United Automobile, Aircraft and Agricultural Implement Workers.....	AFL-CIO	1,027,00
United Brotherhood of Carpenters and Joiners.....	AFL-CIO	835,00
United Electrical, Radio and Machine Workers.....	Ind.	160,00
United Mine Workers.....	Ind.	600,00
United Packinghouse Workers.....	AFL-CIO	157,69
United Papermakers and Paperworkers.....	AFL-CIO	135,00
United Rubber, Cork, Linoleum and Plastic Workers.....	AFL-CIO	158,57
United Steelworkers.....	AFL-CIO	960,00

Wholesale and Retail Trade: No. of Establishments, 1948 and 1954

Source: Bureau of Census, Department of Commerce.

Kind of business group	1948	1954	Kind of business group	1948	1954
Retail trade, total.....	1,771,317	1,721,650	Tobacco and products (except leaf).....	3,019	2,919
Food group.....	504,902	384,616	Dry goods, apparel.....	11,733	9,919
Eating and drinking places.....	346,677	319,657	Furniture, home furnishings.....	3,813	4,019
General merchandise group.....	52,741	76,198	Paper and its products.....	4,044	5,019
Apparel group.....	115,707	119,743	Farm products—raw materials.....	2,594	3,019
Furniture, furnishings, appliance group.....	85,680	91,797	Automotive.....	14,693	15,019
Automotive group.....	86,194	85,953	Electrical goods.....	5,443	7,019
Gasoline service stations.....	188,301	181,747	Hardware, plumbing, heating.....	5,901	6,019
Lumber, building, hardware group.....	99,043	100,519	Lumber, construction materials.....	5,890	10,019
Drug and proprietary stores.....	55,903	56,009	Machinery, equipment & supplies.....	21,430	12,019
Liquor.....	33,460	31,240	Metals, metalwork (except scrap).....	1,803	3,019
Other retail stores.....	164,174	226,903	Waste materials.....	7,717	8,019
Wholesale trade, total.....	243,366	252,318	Other merchant wholesalers.....	15,688	18,019
Merchant wholesalers, total.....	146,518	165,153	Manufacturers' sales branches, offices.....	23,768	22,019
Groceries, confectionery, meats.....	17,345	29,795	Petroleum bulk stations, terminals.....	29,451	29,019
Farm products.....	13,539	3,853	Agents, brokers.....	24,361	27,019
Beer, wines, distilled spirits.....	7,195	7,309	Assemblers of farm products.....	19,268	13,019
Drugs, chemicals, allied products.....	4,671	4,579			

Retail Sales by Kind of Business Group

(in millions of dollars)

Source: U. S. Bureau of the Census.

Kind of business	1952		1958		1959	
	Amount	%	Amount	%	Amount	%
Food stores ¹	\$ 55,270	33.7	\$ 63,432	31.6	\$ 71,662	33.2
Meat group.....	28,337	17.3	33,859	16.9	39,333	18.4
Vehicle, other automotive dealers.....	26,383	16.1	31,575	15.7	36,583	17.0
Battery, accessory dealers.....	1,944	1.2	2,284	1.2	2,750	1.4
Radio and appliance group.....	8,926	5.4	10,323	5.2	11,042	5.1
Furniture, home furnishings stores.....	5,255	3.2	6,637	3.3	6,989	3.2
Refrigerator and appliance, radio stores.....	3,671	2.2	3,686	1.9	4,053	1.9
Building, hardware group.....	10,200	6.2	10,809	5.4	11,857	5.5
Building-materials dealers.....	7,572	4.6	8,154	4.1	9,106	4.2
Flower stores.....	2,628	1.6	2,655	1.3	2,751	1.3
Durable goods stores ¹	108,815	66.3	136,919	68.4	143,751	66.8
Group.....	10,633	6.5	12,558	6.3	13,266	6.2
Men's and boys' wear stores.....	2,497	1.5	2,349	1.2	2,534	1.2
Apparel, accessory stores.....	4,233	2.6	4,993	2.5	5,254	2.4
Shoe and other apparel stores.....	2,210	1.3	2,995	1.5	3,114	1.4
Accessories.....	1,693	1.1	2,221	1.1	2,364	1.2
Proprietary stores.....	4,717	2.9	6,600	3.3	7,150	3.3
Drinking places.....	12,688	7.7	14,746	7.4	15,601	7.2
Hotels.....	39,771	24.2	50,263	25.1	51,681	24.0
Stores.....	32,238	19.6	44,546	22.3	46,043	21.4
Service.....	9,976	6.1	15,758	7.8	16,793	7.8
Merchandise group.....	18,694	11.4	21,665	10.8	23,391	10.9
Department stores, excluding mail order.....	10,277	6.3	12,561	6.3	13,609	6.3
Catalog (sales).....	1,339	.8	1,550	0.8	1,778	0.8
Stores.....	2,996	1.8	3,594	1.8	3,950	1.8
General merchandise stores.....	4,082	2.5	3,960	1.9	4,054	2.0
Stores.....	3,165	1.9	4,437	2.2	4,729	2.2
Sales.....	164,085	100.0	200,347	100.0	215,413	100.0

¹Other durable goods stores, other food stores and other non-durable goods stores not reported separately in totals.

Wholesale Price Indexes by Major Commodity Groups

(1947-49 = 100)

Source: U. S. Bureau of Labor Statistics.

Commodity	1948	1949	1951	1955	1959	1960*
Grains.....	104.4	99.2	114.8	110.7	119.5	119.4
Meat.....	107.3	92.8	113.4	89.6	89.1	87.0
Fabric.....	106.1	95.7	111.4	101.7	107.0	105.7
Clothing & apparel.....	104.4	95.5	110.6	95.3	95.0	96.5
Leather products.....	102.1	96.9	120.3	93.8	114.3	112.0
Lighting materials.....	107.1	101.9	106.7	107.9	112.7	112.0
Chemical products.....	103.8	94.8	110.0	106.6	109.9	110.0
Metals.....	102.1	98.9	148.0	143.8	144.8	145.1
Wood products.....	107.2	99.2	123.9	123.6	125.8	124.7
Nonferrous metal products.....	102.9	98.5	119.6	119.3	132.2	133.2
Iron products.....	103.9	104.8	122.8	136.6	153.4	155.4
Automotive products.....	100.9	106.6	119.0	128.4	153.0	154.1
Other household durables.....	101.4	103.1	114.1	115.9	123.4	123.5
Minerals—structural.....	101.7	104.4	113.6	124.2	137.7	138.1
Alcohol & bottled beverages.....	100.4	101.6	108.1	121.6	131.4	131.7
Other.....	103.1	96.1	104.9	92.0	94.5	93.4

Sales of Leading Retail Outlets

Sources: *Fortune Magazine, Business Week, Moody's Manual of Industrials.*1959 Sales
(in thousands)1959 Sales
(in thousands)

DEPARTMENT STORES

J. C. Penney Co.	\$1,437,489
Federated Department Stores	759,919
May Department Stores Co.	683,964
Allied Stores Corp.	679,488
Macy's	471,842
Gimbels Bros., Inc.	404,840
Marshall Field & Co.	234,339

VARIETY STORES

F. W. Woolworth Co.	\$916,837
W. T. Grant Co.	479,997
S. S. Kresge Co.	404,905
G. C. Murphy Co.	238,839
J. J. Newberry Co.	238,008
S. H. Kress & Co.	159,357 ¹
McCrory-McLellan Stores Corp.	133,379

GROCERY STORES

Great Atlantic & Pacific Tea Co.	\$5,048,574
Safeway Stores, Inc.	2,383,011
Kroger Co.	889,452
American Stores Co.	829,518
National Tea (Chicago)	1,911,902
Food Fair	733,960
Winn-Dixie	666,370
Grand Union	603,468

¹ 1958.

DRUG STORES

Walgreen Co.	\$28
Rexall Drug	22
Sterling Drug Co.	23

SHOE STORES

International Shoe Co.	\$28
Brown Shoe	27
Endicott Johnson Corp.	14
Melville Shoe Co.	13
Edison Bros. Stores, Inc.	16
A. S. Beck Shoe Corp.	7

MAIL-ORDER HOUSES

Sears, Roebuck & Co.	\$4.03
Montgomery Ward & Co.	1.22
Spiegel, Inc.	21

FURNITURE STORES

Barker Bros. Corp.	\$7
Reliable Stores Corp.	21
Sterchi Bros. Stores, Inc.	13

Largest U. S. and Foreign Corporations

(millions of dollars)

Source: *Fortune Magazine.*

Ten Largest Industrial Corporations

	Sales	Assets ¹
General Motors	\$11,233	\$7,908
Standard Oil (N. J.) ..	7,911	9,895
Ford Motor	5,357	3,905
General Electric	4,350	2,561
U. S. Steel	3,643	4,712
Socony Mobil Oil	3,093	3,347
Gulf Oil	2,713	3,576
Texaco	2,678	3,348
Chrysler Corp.	2,643	1,375
Swift & Co.	2,476	554

Five Largest Foreign Industrial Corporations

	Sales
Royal Dutch-Shell (Britain-Holland)	\$5,344
Unilever (Britain- Holland)	3,721
British Petroleum	1,714
Industries (Britain) ..	1,424
Imperial Chemical	
Nestlé (Switzerland)	1,281

Five Largest Transportation Companies

	Operating Revenues (1959)
Pennsylvania Railroad ...	\$888
Southern Pacific Trans- portation System	788
New York Central Railroad	773
Atchison, Topeka & Santa Fe Railway	634
Union Pacific Railroad ...	516

Five Largest Commercial Banks

	Assets ¹
Bank of America	\$11,669
Chase Manhattan Bank	8,472
First National City Bank	8,298
Chemical Bank New York Trust ..	4,314
Morgan Guaranty Trust	4,110

Five Largest Life Insurance Companies

	Assets ¹
Metropolitan	\$17,141
Prudential	15,669
Equitable Life Assurance	9,664
New York Life	6,924
John Hancock Mutual	5,842

¹ As of Dec. 31, 1959.

Five Largest Utilities

American Tel & Tel	\$20
Pacific Gas & Electric	2
Consolidated Edison of N. Y.	2
Commonwealth Edison (Chicago)	6
El Paso Natural Gas (El Paso, Tex.)	1

Number of Service Establishments and Places of Amusement, 1948 and 1954

Source: U. S. Department of Commerce.

Kind of business	1948	1954	Kind of business	1948	1954
SERVICES:					
hops.....	91,993	91,122	Bicycle repair shops.....	1,283	561
nd beauty shops.....	2,591	2,018	Blacksmith shops.....	8,249	5,824
d masseurs.....	1,305	2,265	Electrical repair shops.....	19,440	32,195
arlors.....	74,497	76,544	Jewelry, watch, clock repair.....	12,750	11,246
and dyeing plants.....	25,534	29,200	Leather goods repair.....	560	393
and dress suit rental.....	510	515	Locksmiths and gunsmiths.....	1,518	1,801
ervice.....	384	381	Musical instrument repair.....	789	2,972
ervice, crematories.....	18,675	18,387	Radio repair.....	12,558	22,824†
ir and storage.....	2,334	1,439	Refrigerator repair.....	2,531	5,037
ing.....	1,426	947	Saw, knife and tool sharpening and repair.....	1,304	2,746
s, all types.....	19,182	30,269	Typewriter repair.....	638	775
ply service.....	1,176	1,371	Upholstery, furniture.....	10,297	13,305
phic studios.....	14,712	17,293	Welding shops.....	3,536	9,244
ing and repairing.....	1,517	1,777	OTHER SERVICES:		
air shops.....	44,151	26,843	Hotels.....	29,650	24,778
ie parlors.....	2,962	1,595	Tourist courts and camps.....	25,919	42,184
SERVICES:			AMUSEMENT PLACES:		
ng agencies.....	3,279	5,063	Amusement parks, devices and shoot- ing galleries.....	2,153	2,488
rs.....	670	1,639	Bands, orchestras, entertainers.....	2,026	7,097
ing and photostat.....	672	1,019	Bathing beaches (not municipal).....	261	360
ated machine.....	1,302	482	Billiard and pool parlors.....	9,661	7,639
credit reporting.....	2,652	5,220	Boat and canoe rental.....	1,587	1,811
gencies.....	603	1,123	Bowling alleys.....	4,505	5,062
ng, exterminating.....	1,393	3,270	Clubs, baseball.....	357	271
ent agencies.....	2,231	3,153	Clubs, football.....	21	25
ecorating.....	601	2,944	Dance halls, studios, schools.....	1,074	2,265
icates.....	77	467	Race tracks, automobile.....	112	454
vertising.....	798	1,307	Race tracks, dog.....	15	145
shing laboratories.....	1,703	1,719	Race tracks, horse.....	71	1,246
ing shops.....	4,283	5,703	Riding academies.....	709	689
answering service.....	367	1,171	Skating rinks.....	1,424	1,799
eaning service.....	1,260	4,231	Sports promoters, commercial oper- ators.....	6,518	7,799
splay services.....	279	1,101	Swimming pools (not municipal).....	499	652
SERVICES:			Theaters, motion pictures.....	17,689	18,491
ie repair services and	95,544	94,342	Theaters and theatrical producers.....	1,426	2,179
ie rentals.....	1,011	2,872*			
ie storage, parking.....	8,533	8,572			

s truck rental. † Includes TV repair.

Advertising Expenditures by Medium

Source: Printers' Ink.

	1948		1949		1950		1958		1959	
	Amount (million dollars)	% of total	Amount (million dollars)	% of total	Amount (million dollars)	% of total	Amount (million dollars)	% of total	Amount (million dollars)	% of total
edium.....	1,749.6	36.0	1,905.0	36.6	2,063.2	36.3	3,120	30.6	3,517	31.7
.....	617.1	12.7	633.8	12.2	667.1	11.7	616	6.0	638	5.8
.....	512.7	10.5	492.5	9.5	514.9	9.0	770	7.6	866	7.8
.....	689.1	14.2	755.6	14.5	803.2	14.1	1,560	15.3	1,573	14.2
ers.....	250.9	5.2	248.1	4.8	251.1	4.4	540	5.3	566	5.1
.....	132.1	2.7	131.0	2.5	142.5	2.5	199	2.0	193	1.8
.....	20.4	.4	20.5	.4	21.2	.4	34	0.3	36	0.3
.....	...	...	63.0	1.2	185.0	3.3	1,360	13.3	1,526	13.7
s.....	891.7	18.3	952.7	18.3	1,043.1	18.3	1,997	19.6	2,175	19.6
.....	4,863.6	100.0	5,202.2	100.0	5,691.3	100.0	10,196	100.0	11,090	100.0

1 farm papers.

Financial Condition of U. S. Life Insurance Companies

(in millions of dollars)

Source: Institute of Life Insurance.

Year	Assets (admitted) Dec. 31	Total income	Premium income	Payment to policyholders*
1910.....	3,876	781	593	387
1920.....	7,320	1,764	1,381	745
1929.....	17,482	4,337	3,343	1,962
1932.....	20,754	4,653	3,495	3,087
1939.....	29,243	5,453	3,776	2,642
1945.....	44,797	7,674	5,159	2,667
1948.....	55,512	9,751	7,157	3,237
1950.....	64,020	11,337	8,189	3,731
1955.....	90,432	16,544	12,546	5,383
1957.....	101,309	19,333	14,775	6,661
1958.....	107,580	20,249	15,471	7,231
1959.....	113,650	21,790	16,622	7,531

* Beginning 1943, data include payments to U. S. residents by domestic and foreign companies.

Life Insurance in Force in U. S.

(in millions of dollars)

Source: Spectator Yearbook and Institute of Life Insurance.

	Dec. 31	Ordinary	Group	Industrial	Total
1910.....	11,783	.....	.....	3,125	14,908
1915.....	16,650	100	.....	4,279	21,029
1925.....	52,892	4,247	.....	12,318	69,457
1929.....	75,686	8,994	.....	17,349	101,029
1930.....	78,576	9,801	.....	17,963	106,340
1933.....	70,872	8,681	.....	16,630	96,183
1935.....	70,684	10,208	.....	17,471	98,363
1940.....	79,346	14,938	.....	20,866	115,150
1945.....	101,550	22,172	.....	27,675	151,397
1948.....	131,158	37,068	.....	31,253	200,479
1950.....	149,071	47,793	.....	33,415	230,279
1951.....	159,054	54,398	.....	34,870	253,322
1955.....	216,600	101,300	.....	39,682	357,582
1957.....	264,678	133,794	.....	40,139	438,611
1958.....	287,834	144,607	.....	39,646	472,087
1959.....	315,953	159,807	.....	39,688	515,448

* Includes credit insurance.

Domestic Passenger Traffic by Major Carriers

(in millions of passenger-miles)

Source: Interstate Commerce Commission; Corps of Engineers, U. S. A.; Civil Aeronautics Board; Assn. of American Railroads.

Year	Steam railroads		Buses		Air carriers		Electric Interurban railways		Inland waterways ¹
	Passenger- miles	% of total	Passenger- miles	% of total	Passenger- miles	% of total	Passenger- miles	% of total	Passenger- miles
1939.....	22,713	65.0	9,100	26.0	683	2.0	956	2.7	1,486
1941.....	29,406	62.7	13,100	27.9	1,385	3.0	1,177	2.5	1,821
1944.....	95,663	74.2	26,920	20.8	2,178	1.7	2,042	1.6	2,187
1947.....	45,972	58.5	23,948	30.4	6,110	7.8	771	1.0	1,845
1949.....	35,133	52.8	22,411	33.7	6,753	10.1	842	1.3	1,402
1953.....	31,679	46.4	19,730	28.9	14,760	21.6	582	0.9	1,487
1954 ²	29,310	38.4	25,614	33.6	19,568	25.6	157	0.2	1,701
1957.....	25,914	31.8	24,998	30.7	28,302	34.7	337	0.4	1,930
1958.....	23,295	31.1	20,756	27.7	28,522	38.0	310	0.4	2,873
1959 ³	22,100	28.5	20,400	26.4	32,800	42.4	300	0.4	1,800

¹ Rivers, canals and Great Lakes. ² Preliminary. ³ Estimated.

Domestic Freight Traffic by Major Carriers

(in millions of ton-miles)

Source: Interstate Commerce Commission; Corps of Engineers, U. S. A.; Civil Aeronautics Board; Assn. of American Railroads.

Year	Steam railways ¹		Inland waterways ²		Motor trucks		Oil pipelines		Air carriers	
	Ton- miles	% of total	Ton- miles	% of total	Ton- miles	% of total	Ton- miles	% of total	Ton- miles	% of total
1939.....	338,125	64.22	88,897	16.88	43,931	8.34	55,602	10.56	12	0.00
1941.....	480,730	64.68	130,916	17.61	63,258	8.51	68,428	9.20	19	0.00
1944.....	745,573	70.14	137,005	12.89	47,395	4.46	132,864	12.50	71	0.00
1947.....	663,442	67.51	135,964	13.84	77,918	7.93	105,161	10.70	158	0.00
1949.....	533,862	61.17	130,192	14.91	93,653	10.73	114,916	13.16	235	0.00
1951.....	654,340	59.05	168,143	15.17	133,160	12.02	152,115	13.73	378	0.00
1953.....	613,171	52.55	180,622	15.49	206,808	17.72	165,728	14.30	427	0.00
1956.....	655,891	48.2	219,973	16.2	253,751	18.7	229,959	16.9	563	0.00
1957.....	626,222	46.3	231,792	17.2	260,856	19.3	232,660	17.2	601	0.00
1958.....	558,738	46.3	189,016	15.7	246,984	20.5	211,289	17.5	579	0.00
1959 ³	582,000	45.6	195,000	15.2	275,000	21.5	225,000	17.6	670	0.00

¹ Includes express and mail. ² Rivers, canals and domestic traffic on Great Lakes. ³ Estimated. ⁴ Negligible.

Farm Income—Estimated Receipts from Major Farm Marketings (in millions of dollars)

Source: U. S. Department of Agriculture.

	Cotton and cotton- seed	Tobacco	Food grains	Oil- bearing crops	Feed grains and hay	Vege- tables	Fruits and nuts	Meat animals	Dairy products	Poultry & eggs
.....	2,282	500	1,749	96	1,173	631	597	4,045	1,522	1,106
.....	1,511	279	788	85	697	751	582	3,017	1,838	1,187
.....	461	115	220	29	247	359	299	1,159	986	562
.....	627	271	464	110	485	545	411	2,271	1,346	775
.....	1,548	688	1,369	581	1,203	1,510	1,446	5,706	2,938	2,473
.....	2,245	1,033	2,768	908	2,328	1,710	1,160	9,340	4,046	2,926
.....	2,632	904	2,339	846	2,299	1,641	1,013	8,383	3,778	3,088
.....	2,849	1,187	1,896	1,058	1,966	1,670	1,214	11,308	4,290	3,667
.....	2,703	1,161	2,312	912	2,323	1,624	1,272	8,868	4,114	3,013
.....	2,517	1,163	2,039	1,224	2,561	1,852	1,388	8,246	4,478	3,219
.....	1,784	967	1,878	1,154	2,328	1,539	1,415	9,389	4,651	3,001
.....	2,134	1,008	2,510	1,424	2,781	1,589	1,503	11,178	4,562	3,286
.....	2,433	1,076	2,250	1,289	2,763	1,605	1,585	10,603	4,598	2,849

Income (in millions of dollars)

Source: U. S. Department of Agriculture.

Est. cash income			
Crops	Livestock and livestock products	Government payments	Total cash income
7,645	6,925	...	14,570
5,120	6,179	...	11,299
2,532	3,837	...	6,369
2,957	4,117	573	7,647
4,605	6,470	544	11,619
9,419	12,001	742	22,162
10,835	13,719	772	25,326
13,231	16,523	314	30,068
12,586	15,426	185	28,197
12,575	16,198	283	29,056
13,053	19,569	286	32,908
14,627	18,498	292	33,417
13,797	17,178	213	31,188
13,792	16,207	554	30,553
12,381	17,376	1,016	30,773
14,259	19,301	1,089	34,649
14,441	18,336	682	33,459

Population and Property

Source: U. S. Bureau of the Census.

Item	1930	1940	1950
Population (thousands) ..	29,447	29,047	24,335
Farms (thousands) ..	6,289	6,097	5,382
% of total ..	42.2	38.7	26.8
Farms (million acres) ..	986	1,061	1,159
Average per farm ..	156.9	174.0	215.3
Farm property (mil- lions)* ..	56,973	41,227	101,738

land, buildings, livestock, implements and

U. S. Farm Index (1910-14 = 100)

Source: U. S. Department of Agriculture.

Year	Prices paid by farmers*	Prices rec'd by farmers†	Parity ratio
1935-39 average ..	125	107	86
1945	189	206	109
1948	259	285	110
1950	255	256	100
1952	286	288	101
1955	281	236	84
1958	293	249	85
1959	298	240	80
1960†	300	240	80

* Commodities, interest and taxes, and wage rates.

† All crops and livestock. ‡ March.

Farm to Retail Price Spreads for Farm Food Products*

Source: U. S. Department of Agriculture.

Year	Retail cost (dollars)	Net farm value (dollars)	Farmer's share of consumer's dollars (%)
Average:			
1913-19	361	170	47
1920-24	444	181	41
1925-29	439	183	42
1933	277	90	32
1937	363	151	42
1939	318	122	38
1945	459	246	54
1949	939	435	46
1950	924	432	47
1953	1,002	452	45
1957	1,007	401	40
1958	1,065	427	40
1959	1,040	395	38
1960†	1,028	393	38

* Retail cost of 1935-39 average annual purchases of farm food products by a family of three average consumers; farm value of equivalent quantities sold by producers adjusted for value of by-products. † February.

Agricultural Output by States, 1959 Crops

Source: U. S. Department of Agriculture.

State	Wheat (1,000 bu.)	Corn (1,000 bu.)	Cotton lint ¹	Potatoes (1,000 cwt.)	Tobacco (1,000 lbs.)	Cattle ² (1,000 head)	Horses (1,000)
Alabama.....	1,380	62,580	727	1,875	562	1,907	1,0
Arizona.....	3,672	1,190	714	1,950	.....	1,110	.....
Arkansas.....	3,640	14,945	1,549	448	.....	1,535	.....
California.....	8,718	18,250	1,926	27,528	.....	4,274	.....
Colorado.....	54,825	25,194	.....	11,575	.....	2,382	.....
Connecticut.....	.....	2,132	.....	1,311	13,940	157	.....
Delaware.....	742	9,075	.....	2,400	.....	65	.....
Florida.....	.....	16,281	9	4,944	25,420	1,990	.....
Georgia.....	2,255	81,909	520	228	106,548	1,606	1,9
Idaho.....	42,748	5,600	.....	40,222	.....	1,456	1
Illinois.....	42,330	673,350	1	153	.....	4,100	7
Indiana.....	32,630	336,350	.....	1,890	11,040	2,191	4
Iowa.....	2,899	830,346	.....	495	.....	6,797	12,6
Kansas.....	209,700	81,630	.....	230	.....	4,700	3,0
Kentucky.....	4,484	85,775	8	890	357,362	1,935	1,3
Louisiana.....	1,200	17,490	490	374	75	1,898	3
Maine.....	.....	451	.....	34,606	.....	194	.....
Maryland.....	4,032	27,540	.....	324	33,250	545	2
Massachusetts.....	.....	1,728	.....	1,135	5,505	151	1
Michigan.....	35,123	125,571	.....	7,722	.....	1,884	7
Minnesota.....	23,287	334,278	.....	11,674	.....	4,092	3,6
Mississippi.....	858	42,501	1,570	435	.....	2,505	8
Missouri.....	37,950	257,345	506	630	4,350	4,262	4,5
Montana.....	82,090	3,239	.....	1,320	.....	2,428	1
Nebraska.....	69,700	350,906	.....	2,677	.....	5,330	2,4
Nevada.....	756	220	5	260	.....	609	.....
New Hampshire.....	.....	564	.....	340	.....	100	.....
New Jersey.....	1,581	12,350	.....	3,870	.....	219	.....
New Mexico.....	3,849	1,425	303	385	.....	1,267	.....
New York.....	7,729	33,405	.....	15,937	.....	2,218	.....
North Carolina.....	9,353	85,914	327	3,148	725,455	1,075	1,5
North Dakota.....	97,152	22,572	.....	12,000	.....	1,889	3
Ohio.....	32,977	250,992	.....	2,890	22,170	2,462	2,7
Oklahoma.....	89,174	9,306	379	294	.....	3,545	4
Oregon.....	28,464	3,840	.....	8,510	.....	1,587	2
Pennsylvania.....	14,045	78,873	.....	8,160	53,475	1,971	5
Rhode Island.....	.....	264	.....	959	.....	21	.....
South Carolina.....	3,936	25,731	414	540	142,560	631	5
South Dakota.....	18,204	79,774	.....	438	.....	3,426	1,3
Tennessee.....	3,720	67,635	657	910	127,783	1,876	1,3
Texas.....	59,850	42,728	4,438	2,572	.....	9,276	1,2
Utah.....	5,355	3,050	.....	1,488	.....	749	.....
Vermont.....	.....	3,172	.....	297	.....	423	.....
Virginia.....	6,462	38,410	11	3,401	141,095	1,407	.....
Washington.....	73,323	6,080	.....	10,520	.....	1,237	.....
West Virginia.....	588	7,650	.....	770	4,000	568	.....
Wisconsin.....	1,853	179,790	.....	6,570	25,370	4,295	1,7
Wyoming.....	5,517	1,769	.....	728	.....	1,175	.....
Total.....	1,128,151	4,361,170	14,551	242,998	1,799,965	101,520	58,4

¹ Thousands of 500 lb. bales. ² Number on farms as of Jan. 1, 1960.

Domestic Animals on Farms. Number and Value

Source: U. S. Department of Agriculture.

January 1:	Number (thousands)							Value of domestic animals (millions of dollars)
	Horses & Mules	Cattle	Dairy cows	Sheep	Swine	Chickens	Turkeys	
1945.....	11,950	85,573	27,770	46,520	59,373	516,497	7,082	11,707
1951.....	7,036	82,083	23,722	30,635	62,852	442,657	5,091	22,165
1953.....	5,403	94,241	24,094	31,861	54,294	429,731	5,305	19,477
1957.....	3,574	94,502	22,916	30,840	51,703	390,137	5,799	11,132
1958.....	3,354	93,350	22,233	31,337	50,980	370,884	5,542	14,070
1959.....	3,142	96,650	21,488	28,497	56,924	383,529	5,923	18,093
1960.....	3,089	101,520	21,331	29,481	58,464	366,859	5,673	16,236

Regional Economic Differences

U. S. Depts. of Commerce and Labor and *Sales Management*, American Telephone and Telegraph Co. and Edison Electric Institute.

State	1950 % of employed in		Income received per capita, 1959†	State income as % of total U. S. income 1959§	Est. retail sales* (\$ millions, 1959)‡	% distribution of electric customers, Jan. 1, 1960	% households with telephone service, Jan. 1, 1960
	Agri- culture	Manufac- turing					
nd	9.3	34.2	\$1,768	0.45	13,365	6.14	91
mpshire	6.5	40.4	2,010	0.32	1,094	0.61	74
ussetts	18.2	24.6	1,789	0.18	764	0.41	82
land	1.8	37.4	2,444	3.25	476	0.24	78
ut	1.5	44.0	2,156	0.48	6,709	2.96	94
ut	2.9	42.6	2,817	1.81	1,000	0.51	83
ntic	.....	.....	.....	.....	3,322	1.46	99
K.	2.9	29.8	2,736	11.84	43,034	19.34	89
ey	2.5	37.7	2,608	4.05	22,034	9.53	89
ania	4.1	35.5	2,222	6.50	7,844	3.53	94
Central	.....	.....	.....	.....	13,156	6.28	86
	6.9	36.6	2,328	5.77	45,835	20.40	83
	11.6	34.8	2,102	2.55	11,994	5.38	84
	7.1	32.0	2,610	6.76	5,578	2.69	77
	6.7	40.9	2,253	4.60	13,732	5.60	86
	18.6	30.6	2,116	2.17	9,743	4.42	82
Central	.....	.....	.....	.....	4,787	2.31	84
a	22.1	16.3	1,962	1.75	19,369	8.99	84
	28.5	15.2	1,953	1.42	4,195	1.43	89
	17.5	21.8	2,145	2.43	3,592	1.65	89
kota	44.2	2.9	1,526	0.26	5,513	2.52	79
kota	40.5	4.9	1,476	0.27	800	0.35	72
	29.6	9.2	1,981	0.73	826	0.39	73
	23.0	12.6	1,994	1.11	1,839	0.84	86
tic	.....	.....	.....	.....	2,604	1.31	83
	8.8	32.4	2,946	0.35	27,854	13.56	69
	6.1	24.9	2,343	1.87	639	0.24	86
	0.2	7.3	2,943	0.58	3,542	1.89	81
	14.6	20.5	1,816	1.85	1,411	1.89	84
nia	9.8	18.9	1,635	0.80	4,012	1.96	69
olina	24.6	27.9	1,485	1.78	1,662	1.01	62
olina	26.1	27.9	1,332	0.83	4,254	2.34	58
Central	21.2	23.0	1,553	1.60	1,860	1.17	53
	12.2	10.7	1,980	2.44	3,848	2.06	64
Central	.....	.....	.....	.....	6,625	2.89	78
	25.7	15.8	1,514	1.19	10,633	6.31	59
	21.8	21.1	1,521	1.41	2,733	1.60	59
	24.3	21.8	1,409	1.21	3,478	1.93	66
i Central	42.1	12.6	1,162	0.66	2,801	1.71	58
Central	.....	.....	.....	.....	1,621	1.07	45
	35.0	13.8	1,322	0.62	18,819	8.40	68
	17.3	15.1	1,575	1.36	1,681	1.00	50
	20.5	9.8	1,786	1.09	3,172	1.68	70
	16.0	13.5	1,908	4.74	2,510	1.41	78
	.....	.....	.....	.....	11,456	5.31	68
	24.8	8.5	1,955	0.35	8,609	3.69	74
	26.8	9.2	1,782	0.31	898	0.40	77
	20.5	6.0	2,149	0.19	879	0.39	76
	15.1	12.2	2,123	0.98	446	0.19	75
o	18.4	5.9	1,833	0.44	2,278	1.02	84
	14.7	8.8	1,959	0.63	1,065	0.45	62
	12.4	12.2	1,848	0.43	1,581	0.64	63
	10.5	5.1	2,745	0.20	1,005	0.44	81
	.....	.....	.....	.....	456	0.16	63
	9.3	21.2	2,271	1.67	28,704**	12.12	83
	12.1	22.7	2,171	1.01	3,682	1.69	80
Central	7.3	19.6	2,661	10.71	2,322	1.07	73
	12.2	25.9	2,166	100.00	21,907	9.36	85
	.....	.....	.....	.....	216,221**	100.00	80

ht 1958 *Sales Management's* "Survey of Buying Power"; further reproduction not licensed. † Hawaii, \$2,550. ‡ Alaska, 213,749; Hawaii, 579,058. § Hawaii, 0.34; Alaska, 0.15. ** Includes Alaska and

Receipts and Expenditures of the National Government (in millions of dollars) Source: U. S. Treasury Department.

Yearly average or year ended June 30	Receipts				Expenditures					
	Customs (including tonnage tax) ¹	Internal revenue		Net receipts ²	Department of the Army ³	Department of the Navy	Interest on public debt	All other	Total expendi- tures ⁴	Surplus (+) or deficit (-)
		Income and profits tax	Other							
1789-1800.....	6	.....	.....	7	2	.....	3	1	6	.....
1801-1810.....	12	.....	.....	13	2	.....	4	2	9	+4
1811-1820.....	16	.....	2	21	11	5	5	3	24	-3
1821-1830.....	20	.....	.....	22	4	3	4	5	16	+6
1831-1840.....	20	.....	10	30	8	5	.....	11	24	+6
1841-1850.....	24	.....	3	27	13	7	.....	11	32	-5
1851-1860.....	54	.....	6	60	16	12	.....	29	60	.....
1861-1865.....	69	.....	20	161	548	65	35	36	684	-523
1866-1870.....	179	17	55	447	128	28	135	86	377	+70
1871-1875.....	186	51	113	337	40	23	112	112	287	+50
1876-1880.....	146	.....	117	288	37	16	100	102	255	+33
1881-1885.....	202	.....	132	367	43	16	64	135	258	+109
1886-1890.....	216	.....	127	375	40	18	44	177	279	+96
1891-1895.....	177	.....	150	353	50	29	30	255	364	-11
1896-1900.....	185	.....	207	435	111	48	38	260	457	-22
1901-1905.....	260	.....	255	559	133	86	28	288	535	+24
1906-1910.....	311	4	257	628	169	113	23	334	639	-11
1915.....	210	80	336	698	202	142	23	394	761	-63
1918.....	180	2,314	872	3,665	4,870	1,279	190	6,358	12,697	-9,032
1919.....	602	2,331	607	4,033	426	365	678	1,830	3,299	+734
1929.....	251	746	858	2,021	435	349	689	3,150	4,623	-2,602
1933.....	486	2,163	2,434	4,979	628	557	866	5,705	7,777	-2,777
1937.....	319	2,189	2,972	5,104	695	673	941	6,657	8,966	-3,862
1939.....	324	16,094	2,972	22,202	42,526	20,888	1,808	14,400	79,622	-57,420
1943.....	355	29,303	6,050	44,762	50,490	30,047	3,617	14,549	98,703	-53,941
1945.....	494	35,173	8,729	40,043	9,172	5,597	4,958	19,562	39,289	+754
1947.....	384	29,482	10,074	38,246	7,862	4,435	5,339	20,730	40,057	-1,811
1949.....	423	28,263	11,186	37,045	5,789	4,130	5,750	20,977	40,167	-3,122
1950.....	624	37,753	13,354	48,143	8,636	5,863	5,613	18,163	44,633	+3,510
1951.....	613	54,073	15,808	64,825	17,054	11,875	6,503	23,756	74,274	-9,449
1953.....	562	53,906	16,394	64,655	13,515	11,293	6,382	20,913	67,772	-3,117
1954.....	705	56,632	18,476	78,820	9,274	9,744	6,787	23,986	66,540	+1,626
1956.....	754	60,560	19,612	83,675	9,705	10,397	7,244	23,726	69,433	+1,596
1957.....	800	59,102	20,877	83,974	9,776	10,913	7,607	25,203	71,936	-2,819
1958.....	948	58,826	20,972	83,904	10,784	11,720	7,593	32,017	80,697	-12,427

¹ Retaining 1922, tonnage tax incl. in "Other receipts." ² Net receipts equal total receipts less (a) appropriations to Federal old-age and survivors' insurance, trust fund for... ³ Net receipts equal total receipts less (a) appropriations to Federal old-age and survivors' insurance, trust fund for... ⁴ Total expenditures equal total receipts plus (a) appropriations to Federal old-age and survivors' insurance, trust fund for...

Money and Interest Rates

(Per cent per annum)

Source: Federal Reserve Board.

Open market rate in New York City			Commercial loan rates		
Prime commercial paper, 4 to 6 months*	Prime bankers' acceptances, 90 days*	Call loans, renewal rate†	New York City	7 other northern & eastern cities	11 southern & western cities
5.85	5.03	7.61	5.76	5.82	5.93
2.73	1.28	2.05	4.20	4.81	5.21
1.73	.63	1.16	3.43	4.46	5.04
.76	.13	.56	1.76	3.39	3.76
.81	.44	1.00	1.69	2.75	3.26
.54	.44	1.00	1.97	2.55	3.19
.75	.44	1.00	1.99	2.51	2.73
1.03	.87	1.38	1.81	2.33	2.76
1.48	1.12	1.63	2.37	2.71	3.10
2.17	1.60	2.17	2.83	3.09	3.52
2.52	1.88	3.06	3.47	3.68	4.04
3.81	3.45	4.38	4.47	4.63	4.83
2.46	2.04	3.38	4.12	4.34	4.67
3.97	3.49	4.12	4.83	5.02	5.23
4.13	3.63	4.75§	5.18||	5.34||	5.57||

ing rate. † New York Stock Exchange; average of daily quotations. ‡ Week ending April 2. § Week ending March 16. || March.

U. S. Money in Circulation by Denomination¹

(in millions of dollars)

Source: U. S. Treasury Department.

	1939	1940	1943	1945	1950	1951	1953	1957	1958	1959
590	648	1,019	1,274	1,554	1,654	1,812	1,789	2,182	2,304	
559	610	909	1,039	1,113	1,182	1,249	1,302	1,494	1,511	
36	39	70	73	64	67	72	77	83	85	
1,019	1,129	1,973	2,313	2,049	2,120	2,119	2,102	2,186	2,216	
1,772	2,021	5,194	6,782	5,998	6,329	6,565	6,615	6,624	6,672	
1,576	1,800	5,705	9,201	8,529	9,177	9,819	9,985	10,288	10,476	
460	538	1,481	2,327	2,422	2,544	2,732	2,696	2,792	2,803	
919	1,112	2,912	4,220	5,043	5,207	5,581	5,575	5,886	5,913	
191	227	407	454	368	355	333	283	275	261	
425	523	749	801	588	556	486	391	373	341	
20	30	9	7	4	4	4	3	3	3	
32	60	22	24	12	12	11	9	9	5	
7,598	8,732	20,449	28,515	27,741	29,206	30,781	31,082	32,193	32,591	

year. ² Paper currency only: \$1 silver coins reported under coin. ³ Includes unassorted currency.

Public Debt of the United States

Source: U. S. Treasury Department.

Gross debt		June 30—	Gross debt	
Amount (in millions of dollars)	Per capita (dollars)		Amount (in millions of dollars)	Per capita (dollars)
\$ 83	\$ 15.87	1945.....	\$ 258,682	\$ 1,848.60
65	2.06	1947.....	258,286	1,792.05
2,678	75.01	1950.....	257,357	1,696.75
1,263	16.60	1951.....	255,222	1,653.42
1,191	11.85	1953.....	266,071	1,666.81
24,299	228.23	1954.....	271,260	1,670.23
16,931	139.04	1955.....	274,374	1,660.38
19,487	156.10	1956.....	276,200	1,624.71
28,701	225.55	1957.....	270,527	1,582.00
36,425	282.75	1958.....	276,343	1,587.60
40,440	308.98	1959.....	284,706	1,607.35
136,696	999.83	1960 (Mar. 31).....	286,826	1,623.80

for 1800 are as of Jan. 1.

Loans of the International Bank (in millions of dollars)

Source: International Bank for Reconstruction and Development.

Country	No. of loans	Original amount	Net amount ²	Country	No. of loans	Original amount
Africa: Algeria.....	2	\$ 60.0	\$ 60.0	Europe (contd.): Denmark	2	\$ 60.0
Belgian-Congo.....	5	120.0	120.0	Finland.....	7	102.3
East Africa.....	1	24.0	24.0	France.....	1	250.0
Ethiopia.....	4	23.5	23.5	Iceland.....	5	5.9
French West Africa.....	1	7.5	7.1	Italy.....	7	299.6
Gabon.....	1	35.0	35.0	Luxemburg.....	1	12.0
Mauritania.....	1	66.0	66.0	Netherlands.....	10	244.0
Nigeria.....	1	28.0	28.0	Norway.....	4	95.0
Rhodesia & Nyasaland.....	5	146.6	146.6	Turkey.....	6	63.4
Ruandi-Urundi.....	1	4.8	4.8	Yugoslavia.....	3	60.7
Sudan.....	1	39.0	39.0	Western Hemisphere:		
Union of South Africa.....	8	196.8	196.8	Brazil.....	13	292.1
Asia: Burma.....	2	19.4	19.4	Chile.....	8	106.6
Ceylon.....	2	26.5	23.9	Colombia.....	15	148.3
India.....	23	610.6	592.1	Costa Rica.....	2	6.5
Iran.....	4	194.2	194.2	Ecuador.....	6	46.6
Iraq.....	1	12.8	6.3	El Salvador.....	4	31.6
Japan.....	19	342.9	337.8	Guatemala.....	1	18.2
Lebanon.....	1	27.0	27.0	Haiti.....	1	2.6
Malaya.....	1	35.6	35.6	Honduras.....	3	11.2
Pakistan.....	12	151.4	151.3	Mexico.....	8	205.8
Philippines.....	1	21.0	18.5	Nicaragua.....	10	23.0
Thailand.....	6	106.8	106.7	Panama.....	3	7.4
United Arab Republic.....	1	56.5	56.5	Paraguay.....	1	5.0
Australasia: Australia.....	6	317.7	317.7	Peru.....	10	62.6
Europe: Austria.....	8	101.3	99.9	Uruguay.....	4	71.0
Belgium.....	4	76.0	76.0	Total.....	257	\$5,082.3

¹ As of April 1, 1960. ² Of the total \$112.3 millions have been cancelled, refunded or terminated.

Par Values of Member Currencies¹

Member	Currency	U. S. cents per currency unit	Currency units per U. S. dollar	Member	Currency	U. S. cents per currency unit
Australia.....	Pound	224.000	0.446 429	Indonesia.....	Rupiah	(3)
Austria.....	Schilling	3.846 15	26.000 0	Iran.....	Rial	1.320 13
Belgium.....	Franc	2.000 00	50.000 0	Iraq.....	Dinar	280.000
Bolivia.....	Boliviano	(*)	(*)	Israel.....	Pound	55.555 6
Brazil.....	Cruzeiro	5.405 41	18.500 0	Italy.....	Lira	(3)
Burma.....	Kyat	21.000 0	4.761 90	Japan.....	Yen	0.277 778
Canada ²	Dollar	....	....	Jordan.....	Dinar	280.000
Ceylon.....	Rupee	21.000 0	4.761 90	Korea.....	Hwan	(3)
Chile.....	Escudo	....	....	Lebanon.....	Pound	45.631 3
China.....	Yuan	(3)	(3)	Luxemburg.....	Franc	2.000 00
Colombia.....	Peso	51.282 5	1.949 98	Mexico.....	Peso	8.000 00
Costa Rica.....	Colón	17.809 4	5.615 00	Netherlands.....	Guilder	26.315 8
Cuba.....	Peso	100.000	1.000 00	Nicaragua.....	Córdoba	14.2857
Denmark.....	Krone	14.477 8	6.907 14	Norway.....	Krone	14.000 0
Dominican Republic.....	Peso	100.000	1.000 00	Pakistan.....	Rupee	21.000 0
Ecuador.....	Sucre	6.666 67	15.000 0	Panamá.....	Balboa	100.000
Egypt.....	Pound	287.156	0.348 242	Paraguay.....	Guaraní	1.666 67
El Salvador.....	Colón	40.000 0	2.500 00	Peru.....	Sol	(4)
Ethiopia.....	Dollar	40.250 0	2.484 47	Philippines.....	Peso	50.000 0
Finland.....	Markka	0.312 500	320.000	Sweden.....	Krona	19.330 4
France.....	Franc	20.255	4.937 06	Syria.....	Pound	45.631 3
Germany, Federal Republic of.....	Deutsche Mark	23.809 5	4.200 00	Thailand.....	Baht	(3)
Greece.....	Drachma	(3)	(3)	Turkey.....	Lira	35.714 3
Guatemala.....	Quetzal	100.000	1.000 00	Union of South Africa.....	Pound	280.000
Haiti.....	Gourde	20.000 0	5.000 00	United Kingdom.....	Pound	280.000
Honduras.....	Lempira	50.000 0	2.000 00	United States.....	Dollar	100.000
Iceland.....	Króna	2.631 58	38.000 0	Uruguay.....	Peso	(3)
India.....	Rupee	21.000 0	4.761 90	Venezuela.....	Bolivar	29.850 7
				Yugoslavia.....	Dinar	0.333 333

¹ As of Jan. 15, 1959. ² No fixed value. ³ Par value not yet established. ⁴ In Nov. 1949, Peru introduced exchange system, but no agreement on a new par value has been reached. Source: International Monetary Fund.

Exports of Leading Commodities

(Value in millions of dollars)

Source: U. S. Department of Commerce.

Commodity	1958	1959
Crude materials:	\$ 2,139	\$ 1,914
Crude petroleum	526	378
Nonferrous ores and concentrates ¹	656	446
Manganese ore	354	346
Copper ore and concentrates	198	282
Zinc bearing ores	15	7
Lead ore and flue dust	390	455
Crude rubber		
Iron ore	1,297	1,414
Wool, unmanufactured	685	714
Diamonds, rough, uncut, industrial	235	286
Tobacco, unmanufactured	381	385
Undressed furs	137	169
Other	101	96
Foodstuffs:		
Coffee	13,208	12,948
Cane sugar	11,140	11,163
Fruits, edible nuts and vegetables	3,682	3,665
Fish, including shellfish	807	773
Whiskey and distilled spirits	2,269	2,207
Cocoa or cacao beans		
Meat products	698	690
Grains and preparations	230	248
Other	340	311
Semimanufactures:		
Nonferrous metals ²	1,087	1,136
Copper	295	321
Tin		
Aluminum	259	220
Nickel metal and oxide	1,304	1,432
Lead		
Zinc	278	284
Gas oil and fuel oil	503	580
Sawmill products	215	255
Woodpulp		
Diamonds, cut but not set	658	538
Iron and steel semimanufactures	600	634
Industrial chemicals	136	128
Fertilizer materials		
Other	74	76
Finished manufactures:		
Paper and manufactures	480	445
Newsprint	320	261
Textile manufactures	278	326
Burlaps	220	235
Cotton manufactures		
Wool manufactures		
Fabrics of wool and mohair		
Machinery, total		
Agricultural implements and tractors		
Vehicles and parts		
Automobiles, new ³		
Aircraft		
Steel-mill manufactures		
Clocks, watches and parts		
Iron and steel advanced manufactures		
Other		

Crude materials, tire, pile, upholstery and drapery fabrics, etc. ² Special category includes commodities detailed export statistics are restricted for some.

U. S. Imports of Leading Commodities

(Value in millions of dollars)

Source: U. S. Department of Commerce.

Commodity	1958	1959
Crude materials:	\$2,783	\$3,093
Crude petroleum	943	867
Nonferrous ores and concentrates ¹	379	323
Manganese ore	80	75
Copper ore and concentrates	46	23
Zinc bearing ores	52	39
Lead ore and flue dust	52	27
Crude rubber	248	383
Iron ore	232	312
Wool, unmanufactured	165	224
Diamonds, rough, uncut, industrial	112	157
Tobacco, unmanufactured	108	111
Undressed furs	82	96
Other	514	620
Foodstuffs:		
Coffee	3,459	3,421
Cane sugar	1,172	1,097
Fruits, edible nuts and vegetables	523	496
Fish, including shellfish	271	289
Whiskey and distilled spirits	280	309
Cocoa or cacao beans	180	201
Meat products	173	165
Grains and preparations	337	393
Other	67	55
Semimanufactures:		
Nonferrous metals ²	456	416
Copper	2,661	3,305
Tin	721	848
Aluminum	167	224
Nickel metal and oxide	91	103
Lead	141	149
Zinc	123	148
Gas oil and fuel oil	81	75
Sawmill products	36	34
Woodpulp	505	505
Diamonds, cut but not set	264	337
Iron and steel semimanufactures	277	315
Industrial chemicals	68	86
Fertilizer materials	90	279
Other	72	94
Finished manufactures:		
Paper and manufactures	59	62
Newsprint	605	779
Textile manufactures	3,917	5,168
Burlaps	675	743
Cotton manufactures	614	666
Wool manufactures	554	726
Fabrics of wool and mohair	76	91
Machinery, total	150	202
Agricultural implements and tractors	131	171
Vehicles and parts	59	64
Automobiles, new ³	472	656
Aircraft	122	169
Steel-mill manufactures	680	966
Clocks, watches and parts	488	735
Iron and steel advanced manufactures	79	68
Other	162	345
	77	112
	1,237	1,546

¹ Includes ores of ferroalloying metals. ² Includes ferroalloys. ³ Trucks and buses excluded.

U. S. Exports and General Imports by Countries and Areas

(Value in millions of dollars)

Source: U. S. Department of Commerce.

Area and country	Exports, including re-exports ¹			General imports	
	1949	1958	1959	1949	1958
Total.....	11,936.0	17,892.6	17,566.2	6,592.0	12,833.6
Canada.....	1,925.5	3,538.9	3,824.4	1,550.8	2,684.5
20 American Republics.....	2,632.9	4,207.7	3,592.8	2,301.0	3,589.0
Western Europe.....	3,973.0	5,442.0	5,443.5	909.0	3,297.1
Other Areas.....	3,404.6	4,704.0	4,705.5	1,831.2	3,296.0
NORTH AND SOUTH AMERICA					
	(Excluding special categories) ¹				
Canada.....	1,925.5	3,421.5	3,726.5	1,550.8	2,684.5
20 American Republics.....	2,632.9	4,073.2	3,495.0	2,301.0	3,589.0
Mexico.....	454.4	888.4	731.0	243.5	456.8
Central American Republics.....	257.1	334.2	292.6	139.0	223.6
Costa Rica.....	26.2	41.8	40.9	22.4	36.0
El Salvador.....	24.8	44.9	36.9	40.2	48.5
Guatemala.....	43.7	78.9	64.4	43.3	66.1
Honduras.....	32.7	35.7	32.4	15.2	27.8
Nicaragua.....	14.8	36.8	27.7	6.7	21.1
Panama, Republic of.....	114.9	96.2	90.3	11.2	24.1
Cuba.....	374.9	546.2	436.7	387.5	527.8
Dominican Republic.....	36.9	76.5	59.8	24.4	72.1
Haiti.....	23.3	24.9	23.5	19.8	22.7
Argentina.....	123.5	249.1	230.6	97.5	132.9
Bolivia.....	34.6	29.0	23.4	48.5	8.9
Brazil.....	365.0	534.1	406.2	551.8	566.9
Chile.....	138.5	149.0	136.8	152.5	155.7
Colombia.....	167.9	186.3	205.7	241.5	332.9
Ecuador.....	31.0	46.8	48.6	17.1	56.2
Paraguay.....	7.5	10.2	7.9	5.7	7.5
Peru.....	81.9	167.0	121.9	40.2	124.0
Uruguay.....	33.4	21.6	33.4	54.0	8.7
Venezuela.....	503.0	809.8	737.0	278.1	892.3
Netherlands Antilles.....	75.2	74.6	56.9	111.4	315.4
EUROPE					
Western Europe.....	3,973.0	4,465.8	4,488.3	909.0	3,297.1
Austria.....	149.7	57.6	67.4	9.6	41.1
Belgium and Luxemburg.....	300.9	330.1	349.6	94.2	269.8
Denmark.....	91.1	78.0	106.5	6.6	84.6
France.....	465.6	427.2	338.8	61.5	310.8
Germany, Western ²	817.3	734.8	748.6	45.5	635.3
Greece.....	152.2	72.6	51.5	15.7	37.0
Iceland.....	7.4	11.4	13.4	2.2	10.4
Ireland.....	60.7	31.0	30.1	1.7	16.4
Italy.....	451.3	487.1	407.5	70.9	275.0
Trieste.....	11.8	5.2	3.8	.....	0.9
Netherlands.....	268.1	441.0	546.5	59.3	189.8
Norway.....	87.9	69.2	77.0	30.7	75.0
Portugal.....	50.6	31.0	26.7	13.6	22.3
Sweden.....	81.0	195.8	207.1	54.4	125.3
Switzerland.....	137.7	163.5	187.7	93.1	157.1
Turkey.....	82.9	127.3	123.6	55.7	55.4
United Kingdom.....	662.0	838.2	884.4	227.6	868.1
Finland.....	26.0	33.5	43.5	27.4	36.0
Spain.....	49.2	215.0	153.0	24.3	57.4
Yugoslavia.....	19.6	115.4	121.5	14.9	29.6
Soviet Bloc.....	61.8	113.1	89.4	67.4	63.5
ASIA AND OCEANIA					
Western Asia.....	335.5	419.8	451.3	94.7	350.9
Iran.....	77.1	105.8	113.5	16.4	41.9
Iraq.....	12.2	32.1	27.5	5.7	30.1
Israel ⁴	76.8	104.8	116.5	6.0	18.2
Kuwait.....	22.3	42.6	59.8	38.8	167.5
Lebanon.....	39.7	36.1	39.7	2.1	3.8

Economy

Area and country	Exports, including re-exports ¹			General imports		
	1949	1958	1959	1949	1958	1959
India	81.6	58.6	49.7	19.9	72.2	50.7
Indonesia	1,823.7	2,471.2	2,599.8	1,214.5	1,855.5	2,594.7
Southeastern and Eastern Asia	1,650.1	2,227.8	2,277.4	1,089.1	1,646.5	2,257.2
Federation of Malaya	36.2	35.5	38.8	195.5	125.9	188.4
Philippines	17.1	21.8	23.1	34.8	27.1	34.6
Singapore	113.6	72.0	95.9	4.3	51.8	99.8
Sri Lanka	240.4	311.8	336.2	238.8	191.1	207.4
Thailand, Republic of	119.4	61.2	65.6	120.4	173.1	190.4
Taiwan	466.1	843.8	935.2	82.0	670.8	1,028.7
Republic of Vietnam	49.9	215.7	136.7	1.4	2.4	4.0
Yunnan	41.0	112.0	103.7	27.7	26.8	35.4
Laos, Republic of	424.9	291.5	275.2	204.7	274.0	311.7
Siamese (Siam)	28.9	52.3	62.1	48.0	57.2	90.6
Laos and Cambodia	22.7	102.2	107.2	1.7	10.8	14.1
Laos	16.2	69.1	62.1	1.1	14.2	23.5
Laos and Cambodia	124.4	190.2	265.8	97.6	94.6	196.4
Laos	40.1	43.3	48.3	24.4	110.7	135.8
AFRICA						
Algeria	590.8	609.7	673.4	337.5	560.9	590.4
Angola	22.1	27.7	26.5	4.1	0.8	1.1
Cameroon	8.4	11.8	10.6	7.2	37.2	31.6
Congo	46.5	39.1	30.8	36.3	95.0	107.1
East Africa, Total ⁵	16.8	9.2	9.7	22.4	47.8	41.5
Egypt	50.0	52.0	105.9	9.4	17.8	16.8
Libya	3.4	10.8	9.8	8.3	28.6	15.5
Mali	27.8	41.4	39.0	5.8	8.2	10.4
West Africa, Total	33.2	26.7	26.0	2.4	40.1	38.9
Senegal	51.5	47.3	87.6	10.8	33.1	41.9
Nyasaland, Federation of	9.6	11.7	10.2	15.3	32.3	37.2
South Africa ⁶	257.4	249.3	220.7	116.4	99.4	118.7
Other countries	1,760.1	2,236.8	2,426.4	1,156.0	2,120.5	2,685.4

category" exports not available by country of destination. ² Germany prior to 1952. ³ Less than \$50,000. ⁴ Included Palestine prior to 1954. ⁵ The Republic and North Vietnam prior to 1952. ⁶ British Somaliland, Mauritius and dependencies, and other British East Africa. ⁷ Cameroun, French Equatorial Africa, and Gabon.

Balance of Payments of the U. S., 1949-1959 (in millions of dollars)

Source: Department of Commerce, Office of Business Economics.

Item	1949	1950	1951	1954	1957	1958	1959
Exports and services, total	16,061	14,427	20,333	21,110	29,168	25,606	25,452
Transfers under aid programs	210	526	1,470	3,161	2,435	2,281	1,988
Imports and services, total	15,851	13,901	18,863	17,949	26,733	23,325	23,464
Balance, adjusted (excl. military outlays)	12,149	10,117	14,123	12,799	19,390	16,263	16,225
Investment	1,238	1,033	1,556	1,171	1,999	1,672	1,649
Current account	392	419	473	595	785	825	902
Direct investments	1,395	1,593	1,882	2,227	2,881	2,922	3,048
Services	677	739	829	1,157	1,306	1,643	1,640
Exports and services	9,702	12,098	15,142	16,088	20,923	21,053	23,560
Balance, adjusted (excl. military outlays)	6,879	9,108	11,202	10,354	13,291	12,951	15,315
Investment	700	818	974	1,026	1,569	1,636	1,784
Current account	700	754	757	1,009	1,372	1,460	1,610
Expenditures	621	576	1,270	2,603	3,165	3,412	3,090
Imports	802	842	939	1,096	1,526	1,594	1,761
Exports and services	6,359	2,329	5,191	5,022	8,245	4,553	1,892
Transfers to foreign countries	-5,837	-4,533	-4,962	-5,423	-4,753	-4,619	-4,390
Imports and services	-210	-526	-1,470	-3,161	-2,435	-2,281	-1,988
Other government transfers	-5,106	-3,563	-3,106	-1,776	-1,775	-1,798	-1,839
Grants	-521	-444	-386	-486	-543	-540	-563
Net outflow of funds (-)	-660	-621	-528	-664	-2,072	-1,094	-1,310
Capital	-545	-800	-696	-862	-2,102	-2,721	-2,724
Term capital outflow (-)	-92	53	182	244	634	24	548
Increase (-) in foreign gold dollar assets	-92	3,602	343	1,516	-798	3,477	5,201
Reserves	775	-30	470	167	876	380	783

U. S. Foreign Aid, 1945-56

(in billions of dollars)

Source: U. S. Dept. of Commerce.

	1945-47	1948-50	1951-53	1954-56	Total
Net nonmilitary grants	4.8	12.3	5.9	5.2	28.2
Western Europe	1.7	9.2	3.5	1.9	
Asia, Africa and Near East	1.8	2.8	2.2	2.9	
Rest of World	1.3	0.3	0.2	0.4	
Net government loans	7.7	1.7	1.7	-0.2	10.9
Western Europe	6.6	1.5	0.8	-0.6	
Asia, Africa and Near East	0.6	0.1	0.4	0.4	
Rest of World	0.5	0.1	0.5	0.0	
Net military grants	0.7	1.1	8.5	8.3	18.6
Western Europe	0.6	0.3	6.0	5.1	
Asia, Africa and Near East	0.7	0.7	2.2	3.0	
Rest of World	0.0	0.1	0.3	0.2	
Net total, grants and loans	12.3	15.1	16.1	13.3	57.9

NOTE: Total Aid, 1957: 5.5 billion; 3.5 Economic aid, 2.0 Military aid.

U. S. Aid to Foreign Countries

U. S. foreign aid totaled \$72.1 billion from 1945 to 1959. Of this, \$59 billions were grants; \$34 billions for economic aid and \$25 billions for military aid. The current rate of \$4 billion per year is almost equally divided between economic and military aid.

The U. S. aid program began with participation in the United Nations Relief and Rehabilitation Administration, and the post-war period witnessed the highest outpouring of aid by one country (U. S.) in the history of the world. UNRRA provided hungry, needy people in war-stricken areas with emergency food, clothing and shelter. It was followed by the Marshall Plan (1948-52), which helped put European countries back in operation and left them in better economic condition than they had been in 1938. This plan cost the U. S. \$11 billions, of which \$9 billions were in grants and \$2 billions in loans.

After the Marshall Plan the government began its military aid plan to Turkey, France, Japan, etc., as part of its over-all containment policy against Communism. In 1949 President Truman announced the establishment of the "Point IV" technical aid program. The least costly of U. S. aid programs, "Point IV" provides teams of technicians who travel to underdeveloped countries and teach them efficient produc-

tion methods and American know-how. Industrial development abroad is strengthened by the International Finance Corporation. Inaugurated in 1956, the agency helps finance industrial companies on the basis of one-half private and one-half IFC funds. The U. S. share of the corporation's \$93 million capital is \$45 million. Fifty-four other countries contribute.

Loans for "sure-thing" development projects are made by the World Bank (billions loaned since 1944) and the Export-Import Bank. These conservative agencies act only after careful study by bank officials, and their repayment record is excellent.

In addition to government aid, private investors have supplied about 15 billion to set up factories, power plants and experimental ranches abroad.

Foreign aid given by the U. S. in 1959 totaled \$3.9 billions, practically all in grants. The portions allocated for military and nonmilitary purposes included \$1.4 billion to the Far East and Pacific; \$1.4 billion to the Near East and Middle East; and \$1.1 billion to Latin America. In 1959 the U. S. also set up the Inter-American Development Fund, which is scheduled to provide funds to aid development in Latin America.

LEADING NATIONS IN RICHES AND RESOURCES

Source: *Encyclopaedia Britannica*.

Designation "n.d." means no data are available. In such cases, the relative rank of the nation is estimated.

Mineral and Metal Production

COAL ORE (thousands of metric tons, metal content, 1958)

Canada	15.0 ¹
U. of So. Africa	7.2
U.S.S.R.	5.2
U.S.A.	2.7
Czechoslovakia	2.3
Czechoslovakia	1.6
Australia	1.4
U.S.S.R.	1.0
U.S.A.	0.8 ¹
U.S.S.R.	0.8

COAL (thousands of metric tons, 1958)

U.S.S.R.	5,874
U.S.A.	2,988
U.S.S.R.	1,817
U.S.A.	1,611
U.S.S.R.	1,332
U.S.A.	1,100
U.S.S.R.	1,053
U.S.A.	856
U.S.S.R.	733
U.S.A.	366 ¹

COAL (thousands of metric tons, 1958)

U.S.S.R.	54,830
U.S.A.	33,306
U.S.S.R.	19,390
U.S.A.	14,984
U.S.S.R.	13,629
U.S.A.	12,597
U.S.S.R.	11,853
U.S.A.	9,300
U.S.S.R.	6,166
U.S.A.	5,725

COAL (thousands of metric tons, 1958)

U.S.S.R.	300 ¹
U.S.A.	279
U.S.S.R.	270
U.S.A.	266
U.S.S.R.	187
U.S.A.	52
U.S.S.R.	39 ²
U.S.A.	36
U.S.S.R.	35
U.S.A.	27

COAL (thousands of metric tons, 1958)

U.S.S.R.	506.4 ¹
U.S.A.	386.8 ¹

3. United Kingdom	205.7 ²
4. West Germany	125.6
5. China	123.9 ³
6. Poland	96.0
7. France	57.6
8. Japan	47.2
9. India	46.8
10. U. of So. Africa	36.5

¹ Including lignite. ² Excluding No. Ireland. ³ 1957 figures.

COPPER (thousands of metric tons, smelter, 1959)

1. United States	873.4 ¹
2. No. Rhodesia	516.0
3. Chile	492.0
4. U.S.S.R.	372.1 ²
5. Canada	324.0
6. West Germany	272.3 ¹
7. Belgian Congo	264.0
8. United Kingdom	195.6 ¹
9. Japan	193.2 ¹
10. Belgium	186.0

¹ Including secondary copper. ² Estimate.

GOLD (thousands of kilograms, 1958)

1. U. of So. Africa	549.2
2. U.S.S.R.	349.1
3. Canada	142.2
4. United States	54.7
5. Australia	34.3
6. Ghana	26.5
7. Rhodesia, Nyasaland, Fed. & So.	
8. Philippines	17.3
9. Colombia	13.2
10. Belgian Congo	11.5
	11.0

¹ Estimate.

IRON ORE (millions of metric tons, 1959)¹

1. U.S.S.R.	94.8
2. France	60.9
3. United States	54.9
4. Canada	22.2 ²
5. Sweden	18.3
6. Venezuela	15.6
7. United Kingdom	15.1
8. West Germany	13.0
9. East Germany	13.0
10. China	11.0 ³

¹ Approximate metal content: U.S., 50%; U.S.S.R., 60%; France, 35%; Canada, 55%; Sweden, 60%; United Kingdom, 30%; Venezuela, 65%; West Germany, 30%; China, unknown; Luxemburg, 30%. ² Shipments only. ³ 1956 estimate.

LEAD (thousands of metric tons, refined, 1959)

1. United States	345.6
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2. U.S.S.R.	290.1 ¹
3. Australia	241.2
4. Mexico	194.4
5. West Germany	139.5
6. Canada	118.8
7. United Kingdom	90.4 ²
8. Belgium	88.4
9. France	87.0
10. Yugoslavia	84.0

¹ Estimate. ² Includes secondary lead.

MANGANESE ORE (thousands of metric tons, metal content, 1958)

1. U.S.S.R.	2,400
2. India	545
3. Brazil	306
4. U. of So. Africa	302
5. Ghana	248
6. Belgian Congo	166
7. Morocco	156
8. United States	133
9. Japan	103
10. Rumania	50

PETROLEUM, CRUDE (millions of metric tons, 1959)

1. United States	341.0
2. Venezuela	143.0
3. U.S.S.R.	129.6
4. Kuwait	73.2
5. Saudi Arabia	54.0
6. Iran	45.6
7. Iraq	41.5
8. Canada	22.8
9. Indonesia	18.0
10. Mexico	13.2

PIG IRON & FERRO-ALLOYS (millions of metric tons, 1959)

1. United States	55.1 ¹
2. U.S.S.R.	43.2
3. West Germany	21.7 ²
4. United Kingdom	12.8
5. France	12.6
6. Japan	9.8
7. Belgium	5.9
8. China	5.1 ³
9. Poland	4.2
10. Czechoslovakia	4.1

¹ Excluding electric furnace production. ² Including the Saar. ³ 1956.

SILVER (metric tons, 1958)

1. Mexico	1,462.0
2. United States	1,144.6
3. Canada	966.9
4. Peru	806.2

5. U.S.S.R.	800.0 ¹
6. Australia	505.4
7. West Germany ..	278.1
8. Japan	259.3
9. Bolivia	188.0
10. France	160.1

¹ Estimate.**TIN** (thousands of metric tons, 1959)

1. Malaya	38.2
2. Indonesia	22.0
3. Bolivia	21.3
4. Belgian Congo ..	10.5
5. China	10.0 ¹
6. Thailand	9.8
7. Nigeria	5.3
8. United Kingdom ..	1.3
9. Burma	1.2
10. Portugal	1.1

¹ Estimate.**URANIUM**

World production data are generally unavailable, but U. S. output of uranium oxide was estimated at 10,-

000 tons in 1957 as compared with 6,000 tons in 1956. A member of the AEC estimated the known world reserves of uranium concentrates at 25,000,000 tons in Dec., 1957. (In the U. S., an average of 5 lb. of uranium oxide is extrated from each ton of ore.) U. S. reserves of high-grade uranium were estimated at 200,000 tons in 1957; of lower grade, about 6,000,000 tons. The world's most important deposits of uranium are believed to be located in the Belgian Congo; in the Northwest Territories and elsewhere in Canada; in the Colorado plateau area of Colorado, New Mexico, Arizona, and Utah; and in Alaska. Deposits have also been found or reported in Australia, Bolivia, Brazil, Bulgaria, Burma, Ceylon, Chile, China (in Manchu-

ria), Czechoslovakia, Finland, Ethiopia, France, Germany, Greenland, Hungary, Indonesia, Iran, Japan, Madagascar, Mexico, Morocco, Niger, Nigeria, Norway, Panama, Philippines, Poland, Rumania, Sardinia, South Africa, Spain, Sweden, Switzerland, U.S.S.R., and Yugoslavia.

ZINC (thousands of tons, 1959)

1. United States	1,000
2. U.S.S.R.	1,000
3. Canada	1,000
4. Mexico	1,000
5. Belgium	1,000
6. West Germany ..	1,000
7. France	1,000
8. Poland	1,000
9. Japan	1,000
10. Australia	1,000

¹ Including secondary zinc. ² Zinc content of ores. ³ 1957.**Agriculture****BARLEY** (thousands of metric tons, 1958)

1. China	19,760 ¹
2. U.S.S.R.	n.d.
3. United States ...	10,243
4. Canada	5,329
5. France	3,892
6. Turkey	3,600
7. United Kingdom ..	3,221
8. Denmark	2,486
9. West Germany ..	2,412
10. India	2,274 ²

¹ Estimate. ² Average of 3 yrs.**BUTTER** (thousands of metric tons, 1959)

1. U.S.S.R.	621.0 ¹
2. United States ...	602.4
3. West Germany ..	374.4
4. France	330.0 ¹
5. New Zealand	219.8
6. Australia	210.8
7. Denmark	168.0
8. East Germany ...	160.8
9. Canada	146.4
10. Netherlands	80.3

¹ 1957.**CATTLE** (number in millions, 1957-58)

1. India	158.7 ¹
2. United States ...	93.4
3. Brazil	69.5
4. U.S.S.R.	66.8
5. China	45.3 ¹
6. Argentina	40.7
7. Pakistan	23.7

8. Mexico	20.8
9. France	17.9
10. Australia	16.9

¹ 1955-56.**CHEESE** (thousands of metric tons, 1959 factory production)

1. United States	625.2
2. France	390.0 ¹
3. Italy	329.0 ¹
4. Netherlands	190.8
5. West Germany ..	151.2
6. U.S.S.R.	136.2 ²
7. Argentina	122.4
8. Denmark	114.0
9. United Kingdom ..	90.0
10. New Zealand	86.4

¹ 1957. ² 1956.**COTTON GINNED** (thousands of metric tons, 1958)

1. United States ...	2,506
2. China (mainland) ..	2,100
3. U.S.S.R.	1,495
4. India	837
5. Mexico	510
6. Egypt	446
7. Brazil	403
8. Pakistan	275
9. Turkey	180
10. Sudan	127

FORESTS (millions of acres, latest data available, 1959)¹

1. U.S.S.R.	2,275
2. Brazil	975
3. Canada	835
4. United States ...	835

5. Fr. West Africa ...	1,000
6. Fr. Eq. Africa ...	1,000
7. Indonesia	1,000
8. Belgian Congo ...	1,000
9. Sudan	1,000
10. China	1,000

¹ Of present or potential. ² Including savannah.**HOGS** (number in millions, 1957-58)

1. China (mainland) ..	1,000
2. United States ...	1,000
3. U.S.S.R.	1,000
4. Brazil	1,000
5. West Germany ..	1,000
6. Poland	1,000
7. Mexico	1,000
8. East Germany ...	1,000
9. France	1,000
10. United Kingdom ..	1,000

¹ 1955-56.**LAND, ARABLE** (millions of acres, latest data available, 1959)¹

1. U.S.S.R.	1,000
2. United States ...	1,000
3. India	1,000
4. China	1,000
5. Belgian Congo ...	1,000
6. Canada	1,000
7. Argentina	1,000
8. Fr. Eq. Africa ...	1,000
9. Pakistan	1,000
10. France	1,000

¹ 1957.

Statistics

(thousands of metric tons, 1959)	
United States	11,820
U.S.S.R.	4,200
West Germany	2,184
France	1,843 ¹
Australia	1,790
United Kingdom	1,526
Argentina	1,167
India	1,092
Japan	1,020
Canada	916

COW'S (thousands of metric tons, 1959)	
United States	56,424
U.S.S.R.	46,000 ¹
France	20,600 ²
West Germany	18,384
United Kingdom	9,696
Canada	8,280
Australia	7,756 ³
Germany	6,592 ²
Netherlands	6,108
Zealand	5,832
Denmark	5,568
Argentina	5,412
Czechoslovakia	5,412
Italy	4,801 ²
Poland	3,720
U.S.S.R.	1957.
France	1956.

(thousands of metric tons, 1958)	
United States	20,643
U.S.S.R.	n.d.
Canada	6,183
India	2,669
France	2,637
United Kingdom	2,172
West Germany	2,149
Australia	1,577
Germany	1,143
Czechoslovakia	905

EGGS (thousands of metric tons, 1958)	
U.S.S.R.	90,000 ¹
India	35,836
Germany	22,678
France	13,716
United States	12,053
Germany	11,498
Czechoslovakia	7,149

8. United Kingdom	5,645
9. Spain	4,300
10. Italy	3,664
11. Netherlands	3,606
12. Japan	3,396

¹ Estimate.

RICE (thousands of metric tons, 1958)

1. China (mainland)	86,600 ¹
2. India	45,297
3. Japan	14,991
4. Pakistan	12,027
5. Indonesia	11,784
6. Thailand	7,123
7. Burma	6,590
8. Vietnam	3,995
9. Brazil	3,829
10. Korea	3,254

¹ 1957.

RUBBER (thousands of metric tons, 1959)

1. United States ¹	1,402
2. Indonesia	724
3. Malaya-Singapore	709
4. U.S.S.R.	n.d.
5. Thailand	176
6. Canada	102 ¹
7. Ceylon	94
8. East Germany	85
9. Vietnam	74
10. Nigeria	50

¹ Synthetic only.

SHEEP (number in millions, 1958)

1. Australia	149.3
2. U.S.S.R.	120.2
3. China (mainland)	53.4
4. Argentina	47.0
5. New Zealand	46.0
6. India	39.2 ¹
7. U. of So. Africa	38.2 ²
8. United States	31.3
9. Turkey	29.2
10. United Kingdom	26.1
11. Uruguay	23.3 ¹
12. Brazil	20.2
13. Ethiopia	18.0 ³

¹ 1955-56. ² 1956-57. ³ 1954-55.

SUGAR (thousands of metric tons, 1958)

1. Cuba	5,779
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2. U.S.S.R.	5,400
3. Brazil	3,004
4. United States	2,553
5. India	2,165
6. West Germany	1,763
7. France	1,565
8. Australia	1,378
9. Philippines	1,207
10. Poland	1,149
11. Italy	1,119
12. Mexico	1,097
13. Argentina	1,014
14. U. of So. Africa	953
15. East Germany	913

WHEAT (thousands of metric tons, 1958)

1. U.S.S.R.	76,600
2. United States	39,796
3. China	23,650 ¹
4. Canada	10,117
5. Italy	9,815
6. France	9,601
7. Turkey	8,671
8. India	7,865
9. Argentina	6,720
10. Australia	5,824
11. Spain	4,550 ²
12. West Germany	3,693
13. Pakistan	3,601

¹ 1957. ² Including spelt.

WOOL (thousands of metric tons, greasy basis, 1957)

1. Australia	715
2. U.S.S.R.	317
3. New Zealand	245
4. Argentina	191
5. Union of So. Africa	142
6. United States	133
7. China (mainland)	101 ¹
8. Uruguay	79
9. United Kingdom	53
10. Turkey	42
11. Spain	37
12. India	34
13. Brazil	28
14. France	24
15. Chile	21

¹ Estimate.

Industry, Trade, Communications

TELEPHONE (thousands of lines, average, 1959)	
United States	4,878
United Kingdom	413
France	375
U.S.S.R.	n.d.
Canada	313
Italy	203 ¹
Australia	201

8. Netherlands	186
9. Belgium	89
10. Italy	87

¹ 1958.

ALUMINUM (thousands of metric tons, 1959)

1. United States	2,095.2 ¹
2. Canada	544.8 ²

3. U.S.S.R.	535.0 ³
4. West Germany	264.2 ¹
5. France	216.2 ¹
6. Norway	144.8
7. Japan	135.6 ¹
8. United Kingdom	100.8 ¹
9. Italy	75.0
10. Austria	60.2

¹ Including secondary aluminum. ² 1958. ³ 1956.

ELECTRICITY (millions of kwh., monthly average, 1959)

1. United States	66,209
2. U.S.S.R.	22,000
3. United Kingdom	8,764 ¹
4. Canada	8,653
5. West Germany	8,325 ¹
6. Japan	7,668
7. France	5,309
8. Italy	3,967
9. East Germany	3,103
10. Sweden	2,688
11. Norway	2,356
12. Poland	2,102

¹ Not including Saar.

EMPLOYMENT INDEX (non-agricultural, 1959; 1953 = 100)¹

1. Yugoslavia	147
2. Japan	140
3. West Germany	125
4. Philippines	122
5. Hawaii	122
6. Austria	121
7. Poland	118
8. Canada	118
9. New Zealand	116
10. Luxembourg	114

¹ Data on U.S.S.R. and satellites not available.

EXPORT INDEX (1959; 1953 = 100)¹

1. Japan	285
2. Yugoslavia	250 ²
3. West Germany	222
4. Italy	201
5. Austria	190
6. Fr. Eq. Africa	179
7. Netherlands	167
8. France	162
9. Rhodesia & Nyasaland	162
10. Belgium-Luxemburg	154

¹ Volume of exports after eliminating price change effects; not including U.S.S.R. and satellites. ² Estimate.

INDUSTRIAL PRODUCTION INDEX (1959; 1953 = 100)

1. Pakistan	215
2. Yugoslavia	214
3. Japan	208
4. U.S.S.R.	191

5. Korea	173
6. China (Taiwan)	172
7. Czechoslovakia	172
8. Eastern Germany	170
9. Greece	167
10. Poland	163
11. West Germany	162
12. France	159

MERCHANT FLEETS (millions of gross tons, 1958)

1. United States	25.6 ¹
2. United Kingdom	20.3
3. Liberia	10.1 ²
4. Norway	9.4
5. Japan	5.5
6. Italy	4.9
7. Netherlands	4.6
8. Panama	4.4 ²
9. France	4.3
10. Germany (East & West)	4.1
11. Sweden	3.3
12. U.S.S.R.	3.0

¹ Including Great Lakes shipping.
² Mostly vessels of other nations, flying under "flag of convenience," practically tax-free.

MOTOR VEHICLES (production in thousands, 1958)¹

1. United States	6,728
2. West Germany	1,718
3. United Kingdom	1,560
4. France	1,283
5. Italy	501
6. U.S.S.R.	496
7. Canada	369
8. Japan	263
9. Australia	109 ²
10. Sweden	71 ²

¹ Passenger car production greatly exceeds commercial vehicle production in all nations listed except U.S.S.R. (124,800 passenger cars, 370,800 other) and Japan (79,200 and 183,600).
² 1957.

RAILWAYS (millions of metric freight tons carried, monthly average, 1959)

1. United States	173.2
2. U.S.S.R.	114.3 ¹
3. West Germany	21.2
4. Poland	21.0
5. United Kingdom	19.7

6. East Germany	19.7
7. France	17.2
8. Czechoslovakia	17.0
9. Japan	16.7
10. Canada	16.3

¹ 1956.

RETAIL TRADE INDEX (1959; 1953 = 100)¹

1. Argentina	147
2. Yugoslavia	140
3. Japan	125
4. France	122
5. Rumania	122
6. Mexico	121
7. Poland	118
8. Austria	118
9. Hungary	116
10. Finland	114

¹ Internal commerce, principal cities only; data on U.S.S.R. unavailable.

STEEL, CRUDE (million metric tons, 1959)

1. United States	28.5
2. U.S.S.R.	25.0 ²
3. West Germany	22.2
4. United Kingdom	20.1
5. Japan	19.0
6. France	17.9
7. Italy	16.7
8. Belgium	16.2
9. Poland	15.4
10. Czechoslovakia	14.7
11. Canada	14.0
12. China	13.6
13. Luxembourg	12.8

¹ Including Saar. ² 1956.

TELEPHONES (number per 100 population, 1958)

1. United States	173.2
2. Sweden	114.3 ¹
3. Canada	21.2
4. Switzerland	21.0
5. New Zealand	19.7
6. Australia	17.2
7. Denmark	17.0
8. Iceland	16.7
9. Norway	16.3
10. United Kingdom	16.2

Human and Military Resources

BIRTH RATE, HIGHEST ANNUAL (per 1,000 population, 1958)

1. Costa Rica	52.3
2. Guatemala	49.1
3. Mexico	47.0
4. El Salvador	45.1
5. Malaya	43.2 ¹

6. Brazil	43.0 ¹
7. Honduras	42.1
8. China (Taiwan)	41.8
9. Panama	40.8
10. Dominican Republic	40.0

¹ Estimate.

DEATH RATE, LOWEST ANNUAL (per 1,000 population, 1958)

1. Iran	17.2
2. Syria	17.0
3. Israel	16.7
4. Peru	16.3
5. Puerto Rico	16.2

Netherlands	7.1	5. South Korea	700	2. U.S.S.R.	212
Taiwan	7.2	6. Sweden	600	3. United Kingdom	77
Yugoslavia	7.4	7. Yugoslavia	556	4. France	31
Yugoslavia	7.4	8. Switzerland	500	5. Spain	19
United Kingdom	7.6 ¹	9. North Vietnam	450	6. Brazil	17
		10. India	400	7. Sweden	15
		11. North Korea	400	8. Netherlands	14
(estimated person-		¹ Communist China; Formosan		9. Turkey	13
thousands, 1959-60)		forces estimated at 300,000.		10. Italy	11
U.S.R.	3,000				
United States	2,800	NAVIES (number of war-			
Yugoslavia	870	ships, 1959) ¹			
Yugoslavia	812	1. United States	520		

¹ Dec. 1959, not including subma-
rines, frigates, and escort craft; esti-
mated number of submarines on that
date: U.S.S.R., 500; U.S., 196; United
Kingdom, 54.

Value of Exports and Imports

(in millions of U. S. dollars)

Source: Statistical Yearbook, United Nations, and Monthly Bulletin of Statistics, June 1959, United Nations.

Country	Exports*	Imports*	Country	Exports ¹	Imports ¹
	49 ¹	58 ¹	Ireland	361	591
	23 ²	37 ²	Israel	181	433
	1,000	984	Italy	2,895	3,341
	2,012	1,851	Japan	3,456	3,604
	964	1,144	Jordan	10 ³	95 ³
Germany	3,269	3,405	Korea, South	22 ³	448 ⁶
	63	60 ³	Laos	2 ³	30 ³
	1,282	1,361	Lebanon	32 ¹	213 ¹
	375 ³	366 ³	Liberia	40 ³	28 ³
	219	221	Malaya	1,217 ¹	1,338
	57	69	Mexico	756	1,006
	5,365	5,736	Morocco	329	332
	368	421	Netherlands	3,606	3,939
	389 ¹	415 ¹	New Zealand	821	647
France	1,005 ⁴	1,010 ⁴	Nicaragua	64 ³	78 ³
Taiwan (Formosa)	157	231	Norway	810	1,316
	467	415	Pakistan	302 ¹	396 ¹
	80	102	Panama	22	98
	734	130 ¹	Paraguay	34 ³	33 ³
India	1,315 ³	1,357 ³	Peru	311	294
	1,396	1,601	Philippines	534	508
Republic	137 ¹	130 ¹	Poland	1,059 ³	1,227 ³
	94 ¹	95	Portugal	290	473
	443	616	Rumania	395 ²	352 ²
Ethiopia	58 ³	79 ³	El Salvador	113	99
	835	834	Spain	486 ¹	873 ¹
	5,614	5,086	Sweden	2,206	2,400
Italy	1,890 ³	1,680 ³	Switzerland	1,684	1,923
United States	9,805	8,478	Syria	98	176
	263	237 ¹	Thailand	308 ³	393 ³
	204	565	Tunisia	142	153
	103 ¹	150 ¹	Turkey	355	443
	26	30	Union of South Africa	1,196	1,370
	72 ¹	67 ¹	United Kingdom	9,312	10,806
	680 ³	630 ³	United States	17,393	15,050
	65	95	Uruguay	139 ¹	135 ¹
	1,320	1,767	U.S.S.R.	4,298 ³	4,350 ³
	755 ³	514 ³	Venezuela	2,322	1,428
	111 ³	572	Vietnam	55	232 ¹
	567 ¹	326	Yugoslavia	476	685

World Education Statistics

Source: Statistical Yearbook, United Nations, 1959.

NOTE: where figures are not available, the abbreviation n.a. is used; where the illiteracy rate is very low the abbreviation negl. is used.

Country	Illit- eracy rate, % ¹	Number of schools	Colleges and univer- sities	Total students ²	Country	Illit- eracy rate, % ¹	Number of schools	Colleges and univer- sities	Total students ²
Afghanistan	n.a.	698 ³	4 ³	113,489 ³	Japan	negl.	52,219 ⁴	534 ²⁰	22,310
Albania	high	3,021 ⁴	4 ⁴	231,609 ⁴	Jordan	50.0 ¹⁷	1,200 ⁹	5 ³⁰	251
Argentina	8	20,304 ³	8 ³	3,364,093 ³	Korea, South	n.a.	6,244 ⁴	56 ²⁰	4,033
Australia	negl. ⁵	11,007 ⁴	9 ³	2,051,995 ⁴	Kuwait	n.a.	97 ¹³	2 ²⁰	32
Austria	negl.	7,290 ⁴	14 ⁴	1,117,136 ⁴	Laos	63.2 ¹⁷	1,434 ¹³	1 ²⁰	103
Belgium	3.1 ⁶	16,600 ⁴	19 ⁴	1,840,026 ⁴	Lebanon	n.a.	2,278 ⁴	7 ⁴	267
Bolivia	69.2	884	5 ⁷	209,105	Liberia	95.0 ¹²	610 ⁹	3 ⁹	55
Brazil	51.0	90,113 ⁴	11	6,960,083 ⁴	Luxemburg	negl.	67 ³	1 ³	3
Bulgaria	24.2 ⁷	13,266 ⁹	32 ⁴	1,512,085 ⁹	Malaya	61.7 ⁶	5,360 ⁹	2 ³	979
Burma	42.9 ³	11,524 ⁴	7	1,623,749 ⁴	Mexico	38.0 ¹¹	31,195 ¹²	135 ¹²	5,209
Cambodia	n.a.	3,626 ⁴	3	551,340 ⁴	Morocco	n.a.	n.a.	6 ³	656
Canada	negl.	31,127 ³	120 ⁴	3,573,288 ⁴	Nepal	n.a.	1,322 ¹³	14 ³	73
Ceylon	42.0 ⁸	7,413 ⁴	3 ⁴	1,882,835 ⁴	Netherlands	negl.	15,201 ⁴	11 ⁴	2,510
Chile	24.0 ¹⁰	7,387 ⁹	5	1,201,742 ⁹	New Zealand	negl.	2,770 ⁹	6 ⁹	457
China, mainland	n.a.	512,761 ¹²	194 ¹²	58,266,136	Nicaragua	60	3,593 ⁷	1 ⁷	127
China, Taiwan (Formosa)	n.a.	2,382 ⁴	16 ⁴	1,835,771 ⁴	Norway	negl.	7,456 ¹²	8 ³	551
Colombia	37.0 ¹⁰	18,984 ⁴	22	1,617,763 ⁴	Pakistan	86.8 ¹²	49,182 ⁴	163 ¹³	5,478
Costa Rica	21.0 ¹¹	1,623 ⁴	2 ⁴	204,076 ⁴	Panama	28.0 ^{11,20}	1,233 ⁴	1 ⁴	170
Cuba	25.0	9,360 ¹²	7 ¹²	861,238 ¹²	Paraguay	60.0	2,146 ⁴	1 ⁴	304
Czechoslovakia	1.7 ⁹	n.a.	27 ⁴	2,495,136 ⁴	Peru	50.0	726 ¹²	7 ¹²	1,359
Denmark	negl.	3,903 ¹²	12 ¹²	828,733 ¹²	Philippines	37.8 ¹³	27,510 ⁹	n.a.	4,158
Dominican Rep.	57.0 ⁹	4,251 ⁹	1 ⁴	468,602 ⁹	Poland	n.a.	33,250 ⁴	57 ³	5,372
Ecuador	44.0	5,132 ⁴	7 ⁴	584,778 ⁴	Portugal	41.7 ¹¹	17,472 ⁹	13 ⁹	1,010
Egypt	74.5 ⁶	8,600 ⁴	21 ⁴	2,661,954 ⁴	Puerto Rico	25.6 ¹¹	2,392 ³	4 ³	615
Ethiopia-Eritrea	70.0 ¹³	610 ⁹	2 ⁹	140,939 ⁹	Rumania	23.1 ¹²	23,400 ⁴	92 ¹⁷	2,440
Finland	negl.	7,453 ¹²	11 ¹²	848,956 ⁴	El Salvador	58.0 ¹¹	2,601 ⁴	4 ⁹	74
France	3.3 ⁸	89,762 ³	151 ³	8,856,861 ⁹	Saudi Arabia	n.a.	582 ⁴	1 ⁴	287
Germany	negl.	61,587 ⁴	106 ⁴	11,199,422 ⁴	Spain	14.2 ³	10,540 ³	25 ³	3,356
Ghana	n.a.	5,030 ¹⁸	2 ¹⁸	634,011 ¹⁸	Sweden	negl.	8,916 ⁹	15 ⁹	1,167
Greece	23.5 ¹⁰	11,575 ⁹	8 ⁹	1,246,462 ⁹	Switzerland	negl.	(2) ⁹	9 ⁹	700
Guatemala	72 ¹¹	3,897 ⁴	1 ¹²	297,791 ⁴	Syria	n.a.	3,315 ⁴	1 ⁴	449
Haiti	90	1,507 ⁴	13 ⁹	214,476 ⁴	Thailand	46.3 ⁹	21,700 ³	5	3,709
Honduras	65 ¹¹	2,501 ⁴	1 ⁴	161,285 ⁴	Tunisia	n.a.	1,886 ³	6 ⁴	349
Hungary	5.9 ^{14,15}	9,238 ⁹	31 ⁴	1,570,860 ⁴	Turkey	65.4 ¹¹	20,335 ⁹	13 ¹³	2,566
Iceland	negl.	249 ¹⁰	1 ³	26,985 ³	Union of South Africa	70.9 ⁹	10,281 ¹²	10 ⁴	2,036
India	82.1 ¹⁰	326,181 ¹⁸	1,129 ¹²	32,057,398 ¹⁸	United Kg'dm	negl.	31,213 ⁹	26 ⁹	7,312
Indonesia	47.0 ³	37,782 ¹⁸	960 ^{12,20}	8,014,438 ¹⁸	United States	negl.	123,896 ⁴	1,681 ⁴	44,000
Iran	high	9,107 ¹⁸	1 ³	1,279,358 ¹⁸	Uruguay	35.0	1,942 ⁷	1 ⁷	314
Iraq	n.a.	2,159 ⁹	12 ⁹	464,190 ⁹	U.S.S.R.	10.0 ¹⁷	230,620 ¹²	765 ¹²	36,712
Ireland	negl.	5,625 ⁹	3 ⁹	624,439 ⁹	Venezuela	60.0 ¹⁵	7,346 ¹²	5 ¹²	8
Israel	6.9 ¹⁶	3,400 ⁹	12 ⁴	439,144 ⁹	Vietnam	n.a.	6,270 ⁴	18 ⁴	1,235
Italy	10.0 ³	64,784 ¹²	34 ¹²	7,529,313 ¹²	Yemen	n.a.	2,159 ⁹	1 ⁹	94
					Yugoslavia	25.0 ⁷	17,855 ⁹	63 ¹²	2,553

¹ For 10 years and older. ² Includes colleges and universities. ³ 1954. ⁴ 1957. ⁵ For European population. ⁶ 1947. ⁷ 1953. ⁸ 1946. ⁹ 1956. ¹⁰ 1953. ¹¹ 1950. ¹² 1955. ¹³ 1952. ¹⁴ For 6 years and older. ¹⁵ 1949. ¹⁶ Estimate. ¹⁷ 1958. ¹⁸ Includes normal schools. ²⁰ Excluding tribal Indians. ²¹ Incomplete.

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Area and Population by Country

Country	Area, sq. mi.	Population	Year ¹	Country	Area, sq. mi.	Population	Year ¹
	250,966	13,000,000	1957E	Lebanon.....	4,015	1,550,000	1958E
	11,100	1,507,000	1958E	Liberia.....	43,000	1,250,000	1957E
	1,084,359	20,614,000	1959E	Libya.....	679,358	1,136,000	1957E
	2,974,581	10,061,000	1959E	Liechtenstein.....	61	15,000	1957E
	32,374	7,021,000	1958E	Lithuania ²	31,200	2,700,000	1956E
	11,779	9,053,000	1958E	Luxembourg.....	999	320,000	1958E
	19,305	640,000	1957E	Maldives Islands.....	115	82,000	1957E
	424,162	3,316,000	1959E	Mexico.....	760,373	33,304,000	1959E
	3,287,195	64,216,000	1959E	Monaco.....	0.61	21,000	1957E
	42,796	7,793,000	1959E	Mongolian People's Rep..	614,350	1,025,000	1957E
	261,757	20,457,000	1959E	Morocco.....	174,553	10,330,000	1958E
	67,568	9,165,000	1957E	Nepal.....	54,510	8,787,000	1957E
	3,619,616	17,442,000	1959E	Netherlands.....	12,482	11,346,000	1959E
	25,332	9,388,000	1958E	New Zealand.....	103,740	2,331,000	1959E
	286,396	7,465,000	1959E	Nicaragua.....	57,143	1,378,000	1958E
	3,911,209	679,232,000	1959E	Norway.....	125,064	3,557,000	1959E
	439,519	13,824,000	1959E	Pakistan.....	364,737	86,823,000	1959E
	19,659	1,126,000	1959E	Panamá.....	28,753	1,024,000	1959E
	44,217	6,466,000	1958E	Paraguay.....	157,047	1,677,000	1958E
ia.....	49,354	13,564,000	1959E	Peru.....	482,258	10,524,000	1959E
	16,577	4,515,000	1958E	Philippines.....	114,830	24,718,000	1959E
epublic.....	18,703	2,894,000	1959E	Poland.....	120,442	28,783,000	1958E
	105,743	4,169,000	1959E	Portugal.....	35,358	9,052,000	1959E
	386,100	24,781,000	1958E	Rumania.....	91,654	18,059,000	1958E
	17,400	1,100,000	1956E	Saar.....	991	996,000	1955E
	457,142	20,000,000	1957E	Salvador, El.....	8,260	2,520,000	1959E
	130,119	4,414,000	1959E	San Marino.....	38	14,000	1957E
	212,736	44,970,000	1959E	Saudi Arabia.....	617,760	6,036,000	1957E
st) ³	41,380	16,255,000	1958E	Spain.....	194,945	29,894,000	1959E
st) ³	94,719	52,856,000	1959E	Sudan.....	967,500	10,700,000	1957E
	91,843	4,911,000	1959E	Sweden.....	173,564	7,454,000	1959E
	51,182	8,173,000	1958E	Switzerland.....	15,941	5,235,000	1959E
	42,042	3,546,000	1958E	Syria.....	70,014	4,283,000	1958E
	10,748	3,464,000	1959E	Thailand.....	198,270	21,881,000	1959E
	43,277	1,887,000	1959E	Tibet.....	469,143	1,273,969	1953C
	35,905	9,857,000	1958E	Tunisia.....	48,332	3,852,000	1958E
	39,768	169,000	1958E	Turkey.....	296,185	26,881,000	1959E
	1,269,640	402,750,000	1959E	Union of South Africa ¹²	472,733	14,673,000	1959E
	575,893	89,600,000	1959E	U.S.S.R.....	8,602,700	208,827,000	1959E
	636,293	20,149,000	1959E	United Kingdom.....	93,599	51,985,000	1959E
	171,599 ¹⁰	6,590,000	1958E	United States.....	3,552,214 ¹³	177,702,000	1959E
	26,601	2,846,000	1959E	Uruguay.....	68,369	2,700,000	1958E
	7,984	2,061,000	1959E	Vatican City State.....	(¹⁴)	1,000	1957E
	116,316	49,055,000	1959E	Venezuela.....	352,143	6,512,000	1959E
	142,801	92,740,000	1959E	Vietnam (north).....	63,360	14,500,000	1957E
	37,264	1,636,000	1959E	Vietnam (south).....	65,726	12,300,000	1957E
	85,266	22,866,000	1959E	Yemen.....	75,290	4,500,000	1957E
	91,500	1,655,000	1957E	Yugoslavia.....	98,700	18,421,000	1959E
	24,600	2,000,000	1956E				

ated: C—Census. ² Including Formosa (Taiwan), Manchuria and Tibet. ³ Actually Russian S.S.R. ⁴ Ignized by U. S. as independent country. ⁵ Including Eritrea. ⁶ Excluding East Berlin. ⁷ Including Decadese. ⁸ Including Kashmir. ⁹ Excluding Netherlands New Guinea. ¹⁰ Including 80,583 sq. mi. ¹¹ Including Arab Palestine. ¹² Excluding South-West Africa. ¹³ Includes Alaska and 08.7 acres.

America's Tallest Buildings

Building	Stories	Height, ft.	City	Building	Stories	Height, ft.
Empire State	102	1,250	New York	500 Fifth Avenue	60	700
Chrysler	77	1,046	New York	Metropolitan Life	50	700
60 Wall Tower	66	950	New York	Chamlin	55	680
Bk. of Manhattan	71	927	New York	Lincoln	53	673
R. C. A.	70	850	New York	Irving Trust	50	654
Chase-Manhattan	64	813	New York	General Electric	50	641
Woolworth	60	792	New York	Waldorf-Astoria	47	625
City Bank-Farmers Trust	57	741	New York	10 E. 40th St.	48	621
Union Carbide	52	720	New York	New York Life	40	617
Terminal Tower	52	708	New York	Singer	47	612

Largest Cities of the World

(Exact rating of the cities of the world according to size is impossible because of the diversity of the year which census or estimated population figures have been issued. Therefore, the rating shown in this table be considered only approximate.)

City and country	Population	Year*	City and country	Population	Year*
1. Tokyo, Japan.....	9,102,929	1959E	11. Berlin, Germany.....	3,338,561	1958E
2. London (Greater), England.....	8,222,340	1958E	12. Tientsin, China.....	3,100,000	1958E
3. New York, N. Y., U.S.A.....	7,710,346	1960PC	13. Rio de Janeiro, Brazil.....	3,030,619	1958E
4. Shanghai, China.....	6,204,417	1953C	14. Leningrad, U.S.S.R.....	2,888,000	1958E
5. Moscow, U.S.S.R.....	5,032,000	1959C	15. Bombay, India.....	2,839,270	1958E
6. Mexico City, Mexico.....	4,924,500	1959E	16. Paris, France.....	2,820,534	1958E
7. Peking, China.....	4,140,000	1957E	17. Cairo, Egypt.....	2,673,800	1958E
8. Buenos Aires, Argentina.....	3,703,400	1957E	18. Calcutta, India.....	2,548,677	1958E
9. São Paulo, Brazil.....	3,515,600	1958E	19. Osaka, Japan.....	2,547,316	1958E
10. Chicago, Ill., U.S.A.....	3,492,945	1960PC	20. Los Angeles, Calif., U.S.A.....	2,448,018	1958E

Other Large Foreign Cities (over 600,000)

City and country	Population	Year*	City and country	Population	Year*
Ahmedabad, India.....	788,333	1951C	Lódz, Poland.....	696,000	1958E
Alexandria, Egypt.....	1,261,100	1956E	Madrid, Spain.....	1,926,211	1958E
Amsterdam, Netherlands.....	870,973	1959E	Madras, India.....	1,416,056	1958E
Antwerp, Belgium.....	841,686	1957E	Manchester, England.....	703,082	1958E
Baku, U.S.S.R.....	636,000	1959C	Manila, Philippines.....	1,205,340	1958E
Bandung, Indonesia.....	913,528	1959E	Marseilles, France.....	661,492	1958E
Bangalore, India.....	778,977	1951C	Melbourne, Australia.....	1,726,100	1958E
Bangkok, Thailand.....	1,208,865	1956E	Milan, Italy.....	1,355,410	1958E
Barcelona, Spain.....	1,477,811	1959E	Montevideo, Uruguay.....	965,000	1958E
Birmingham, England.....	1,112,685	1951C	Montreal, Canada.....	1,109,439	1958E
Bogota, Colombia.....	944,290	1958E	Mukden, Manchuria.....	1,790,000	1958E
Brussels, Belgium.....	1,385,831	1957E	Munich, Germany.....	1,033,964	1958E
Bucharest, Rumania.....	1,236,906	1956C	Nagoya, Japan.....	1,336,780	1958E
Budapest, Hungary.....	1,850,000	1958E	Nanking, China.....	1,020,000	1958E
Canton, China.....	1,210,000	1952E	Naples, Italy.....	1,096,755	1958E
Capetown, Union of South Africa.....	687,900	1956E	Novosibirsk, U.S.S.R.....	887,000	1958E
Caracas, Venezuela.....	661,275	1957E	Odessa, U.S.S.R.....	667,000	1958E
Casablanca, Morocco.....	682,388	1952C	Port Arthur, Kwantung.....	1,010,000	1958E
Chelyabinsk, U.S.S.R.....	688,000	1959C	Prague, Czechoslovakia.....	984,722	1958E
Chungking, China.....	2,000,000	1952E	Pusan, Korea.....	1,049,363	1958E
Cologne, Germany.....	760,236	1958E	Rangoon, Burma.....	737,079	1958E
Copenhagen, Denmark.....	942,058	1958E	Recife, Brazil.....	733,870	1958E
Delhi, India.....	914,973	1951C	Rome, Italy.....	2,000,000	1958E
Dortmund, Germany.....	629,515	1958E	Rotterdam, Netherlands.....	731,848	1958E
Düsseldorf, Germany.....	685,033	1958E	Saigon-Cholon, Vietnam.....	1,749,360	1958E
Essen, Germany.....	725,580	1958E	Santiago, Chile.....	1,546,884	1958E
Frankfurt am Main, Germany.....	647,238	1958E	Seoul, Korea.....	1,700,000	1958E
Genoa, Italy.....	727,012	1956E	Sian, China.....	628,499	1958E
Glasgow, Scotland.....	1,089,767	1951C	Sofia, Bulgaria.....	725,736	1958E
Gorki, U.S.S.R.....	942,000	1959C	Stalino, U.S.S.R.....	761,000	1958E
Hamburg, Germany.....	1,807,640	1958E	Stockholm, Sweden.....	804,910	1958E
Harbin, Manchuria.....	1,000,000	1952E	Stuttgart, Germany.....	619,907	1958E
Havana, Cuba.....	1,249,000	1959E	Surabaya, Indonesia.....	1,043,283	1958E
Hyderabad, India.....	1,085,722	1951C	Sverdlovsk, U.S.S.R.....	777,000	1958E
Istanbul, Turkey.....	1,214,616	1955C	Sydney, Australia.....	2,016,620	1958E
Jakarta, Indonesia.....	1,992,999	1957E	Taipei, Formosa.....	809,169	1958E
Johannesburg, U. of So. Af.....	1,006,500	1956E	Tashkent, U.S.S.R.....	911,000	1958E
Kanpur, India.....	705,383	1951C	Tblisi, U.S.S.R.....	694,000	1958E
Karachi, Pakistan.....	2,000,000	1959E	Teheran, Iran.....	1,513,164	1958E
Kharkov, U.S.S.R.....	930,000	1959C	Toronto, Canada.....	667,706	1958E
Kiev, U.S.S.R.....	1,102,000	1959C	Tsingtao, China.....	850,308	1958E
Kobe, Japan.....	979,305	1950C	Turin, Italy.....	853,179	1958E
Kuibyshev, U.S.S.R.....	806,000	1959C	Victoria, Hong Kong.....	1,000,000	1958E
Kyoto, Japan.....	1,204,084	1955C	Vienna, Austria.....	1,652,427	1958E
Lahore, Pakistan.....	849,476	1951C	Warsaw, Poland.....	1,088,000	1958E
Lima, Peru.....	1,186,212	1958E	Wuhan, China.....	1,090,000	1958E
Lisbon, Portugal.....	790,434	1950C	Yokohama, Japan.....	1,143,687	1958E
Liverpool, England.....	788,659	1951C			

* E—Estimated; C—Census; PC—Preliminary census figures.

ASTRONOMY AND CALENDAR

By

WILLY LEY



Time

Two natural cycles on which time measurements are based are the year and the day. The year is defined as the time for the earth to complete one revolution around the sun, while the day is the time required for the earth to complete one turn upon its axis. Unfortunately the year needs 365 days plus about six hours to go around the sun once, so that the year does not consist of so and so many whole days. The fractional day has to be taken up by an extra day every fourth year. Because the earth, while turning upon its axis, also moves around the sun, there are two kinds of days. A day may be defined as the interval between the highest position of the sun in the sky on two successive days. This, averaged out over the year, produces the customary 24-hour day. One might also define a day as the interval between the moments when the sun is at a certain point in the sky, say a constellation is directly overhead.

Sidereal time. Astronomers use a point in the sky they call the "vernal equinox" for the determination of sidereal time. Such a sidereal day is somewhat shorter than the "solar day" by about 3 minutes and 56 seconds, so-called "mean solar time."

Mean solar time is the time based on the sun's position in the sky. In ordinary life the day runs from midnight to midnight. It begins when the sun is visible by being 12 hours from the meridian. Astronomers use the so-called "civil day," which runs from noon to noon. This concept was invented by the astronomer Joseph Scaliger, who named it after his father Julius. To avoid the problem of leap-year days and so forth, astronomers picked a conveniently remote date as the beginning and suggested just counting out the days without regard to weeks, months and years. Julian Day 2,437,300.5 is January 1, 1961. The reason for having the day run from noon to noon is the one that astronomical observations usually extend across the midnight boundary (which would require a change in the Julian Day number) if the civil day, like the civil day, ran from midnight to midnight.

Mean solar time, rather than apparent solar time, is what is actually used most of the time. The mean solar time is based on the position of a fictitious "mean sun." The reason why this fictitious sun has to be introduced is the following: the earth turns on its axis regularly; it needs the same number of seconds regardless of the season. But the movement of the earth around the sun is not regular because the earth's orbit is an ellipse. This has the result (as explained in the section The Seasons) that the earth moves faster in January and slower in July. Though it is the earth which changes velocity it looks to us as if the sun did. In January, when the earth moves faster, the *apparent* movement of the sun looks faster. The "mean sun" of time measurements, then, is a sun which moves regularly all year round; the real sun will be either ahead or behind the "mean sun." The difference between the real sun and the fictitious mean sun is called the *equation of time*.

When the real sun is west of the mean sun we have the "sun fast" condition, with the real sun crossing the meridian ahead of the mean sun. The opposite is the "sun slow" situation when the real sun crosses the meridian after the mean sun. Of course what is observed is the real sun. The equation of time is needed to establish mean solar time, which is kept by the reference clocks.

But if all clocks were actually set by mean solar time we would be plagued by a welter of time differences which would be "correct" but a major nuisance. A clock on Long Island, correctly showing mean solar time for its location (this would be *local civil time*) would be slightly ahead of a clock in Newark, New Jersey. The Newark clock would be slightly ahead of a clock in Trenton, New Jersey which, in turn, would be ahead of a clock in Philadelphia. This condition actually prevailed in the past until

Standard time was introduced. Standard time is the correct mean solar time for a designated meridian, and this time is used for a certain area to the east and west of this meridian. In the United States four meridians have been designated to supply

Astronomical Constants

1 light-year	5,880,000,000,000
parsec (<i>parallax</i> of one <i>second</i> , for stellar distances)	3.259 light
velocity of light	186,272 mi
astronomical unit or distance earth-to-sun	93,003,000
mean distance, earth to moon	238,860
general precession	50"
obliquity of the ecliptic	23° 27' 8".26—0".4684 (<i>t</i> —1900)
equatorial radius of the earth	3963.34 statute
polar radius of the earth	3949.99 statute
earth's mean radius	3958.89 statute
oblateness of the earth	1/316,800,000
equatorial horizontal parallax of the moon	57'
earth's mean velocity in orbit	18.5 mi.
sidereal year	365 ^d
tropical year	365 ^d
sidereal month	27 ^d
synodic month	29 ^d
sidereal day	23 ^h 56 ^m 4 ^s .091 of mean solar
mean solar day	24 ^h 3 ^m 56 ^s .555 of sidereal

* *t* refers to the year in question, for example 1958.

standard times; they are 75°, 90°, 105° and 120° west of Greenwich. The 75° meridian determines Eastern Standard Time. It happens to run through Camden, New Jersey, where standard time, therefore, is actual mean solar time and local civil time. The 90° meridian (which happens to pass through the western part of Memphis, Tenn.) determines Central Standard Time, the 105° meridian (passing through Denver) determines Mountain Standard Time and the 120° meridian (which runs through Lake Tahoe) determines Pacific Standard Time.

Canada, extending over more territory from west to east, adds one time zone on either side: Atlantic Standard Time (based on 60° west of Greenwich) for New Brunswick, Nova Scotia and Québec, and Yukon Standard Time (determined by the 135° meridian) for its extreme West. Alaska, extending still farther to the west, adds two more time zones, Alaska Standard Time (determined by the 150° meridian which passes through Anchorage) and Nome Standard Time, based on the 165° meridian just east of Nome.

In general the earth is divided into 24 such time zones, which run one hour apart. For practical purposes the time zones sometimes show indentations and there are a few "subzones" which differ from the neighboring zone by only half an hour, e.g., Newfoundland.

The Date-line. While the time zones are based on the natural event of the sun crossing the meridian, the date must be an arbitrary decision. The meridians are traditionally counted from the meridian of the observatory of Greenwich in England, which is called the zero meridian. The logical place for changing the date is 12 hours, or 180°, from Greenwich. Fortu-

nately the 180th meridian runs through the open Pacific. The date makes a zig-zag in the north to incorporate the eastern tip of Siberia into Siberian time system and then another one to incorporate a number of islands into the Alaska time system. In the south there is a similar zig-zag for the purpose of tying a number of British-owned islands to the New Zealand time system. Otherwise the date line is the same as 180° Greenwich. At points to the east of date-line the calendar is one day earlier than at points to the west of it. A traveler going eastward across the date-line from one island to another would not have to re-set his watch because he would stay outside the time zone (provided he does not cross where the date-line does not coincide with the 180° meridian), but it would be the same time of the previous day.

The Seasons

The seasons are caused by the tilt of earth's axis (23½°) and not by the shape of the earth's orbit around the sun, which is an ellipse. The average distance of earth from the sun is 93 million miles; the difference between aphelion (farthest away) and perihelion (closest to the sun) is 3 million miles, so that perihelion is about 91½ million miles from the sun. The earth goes through the perihelion point a few days after New Year, just when the northern hemisphere has winter. Aphelion is passed during the first day of July. This by itself shows that the distance from the sun is not important within these limits. What is important is when the earth passes through perihelion, the northern end of the earth's axis begins to tilt away from the sun, so that the places beyond the Tropic of Cancer receive only slanting rays from a sun in the sky.*

tilt of the earth's axis is responsible for the lines you find on every globe. In fact, the North Pole is tilted away from the sun as much as possible, the points in the North which can be reached by the sun's rays are $23\frac{1}{2}^\circ$ from the pole. This is the Arctic Circle. The Antarctic Circle is the corresponding $23\frac{1}{2}^\circ$ from the South Pole; the sun's rays cannot reach beyond this point when it is mid-summer in the North.

When the sun is vertically above the equator the day is of equal length all over the earth. This happens twice a year, these are the "equinoxes" in March and September. After having been over the equator in March, the sun will seem to move northward. The northernmost point where the sun can be straight overhead is $23\frac{1}{2}^\circ$ north of the equator. This is the Tropic of Cancer; the sun can never be straight overhead to the north of this line. Similarly the sun cannot be vertically overhead to the south of a line $23\frac{1}{2}^\circ$ south of the equator—the Tropic of Capricorn. This explains the climatic zones. In the Greek word *zone* means "belt" (the Tropic of Cancer and the Tropic of Capricorn, the sun can be straight overhead; this is the tropical zone). The two zones where the sun cannot be straight overhead but will be above the horizon all day of the year are the two temperate zones; the two areas where the sun is never overhead at all for varying lengths of the year are the two polar areas, Arctic and Antarctic.

The sun passes perihelion (point of its orbit closest to the earth) on January 2 and aphelion (point of the orbit farthest from the earth) on July 5.

The Sun

The only exception of the moon and the planets all the lights you see in the sky are stars, of which our sun is by far the largest nor the most spectacularly the one which happens to be closest to us. Stars in the universe are found in galaxies (spiral nebulae) and our sun is a member of one of these galaxies, the edges of which we see as the Milky Way. The total number of stars in the Milky Way is estimated to be 100,000 million. The nearest neighboring galaxy, usually called the Great Nebula in Andromeda, is

made of stars are gigantic balls of gas, kept hot by atomic reactions in their centers. In our sun (and in the centers of the others) this atomic reaction is hydrogen fusion; four hydrogen atoms are combined to form one helium atom. The temperature at the core of our sun is about 20 million degrees centigrade, at the surface the temperature is around 6,000 degrees centigrade, or about 11,000 degrees Fahrenheit. The diameter of the sun is

865,390 miles so that its surface area is approximately 12,000 times that of the earth. Compared to other stars our sun is just a bit below average in size and temperature. Its fuel supply (hydrogen) is estimated to last for another 7 billion years.

Our sun is not motionless in space; in fact it has two proper motions. One is a straight-line motion (as far as is known) in the direction of the constellation Hercules at the rate of about 12 miles per second. But since the sun is a part of the Milky Way system and since the whole system rotates slowly around its own center, the sun also moves at the rate of 175 miles per second as part of the rotating Milky Way system.

In addition to this the sun rotates on its axis. Observing the motion of the sun spots (darkish areas which look like enormous whirling storms) and the exceptionally bright spots called "solar flares" which are usually associated with sun spots has shown that the rotational period of our sun is just short of 25 days. But this figure is valid for the sun's equator only; the sections near the sun's poles seem to have a rotational period of 34 days. Naturally, since the sun generates its own heat and light, there is no temperature difference between poles and equator.

What we call the sun's "surface" is technically known as the photosphere. Since the whole sun is a ball of very hot gas, there is really no such thing as a surface; it is a question of visual impression. Outside the photosphere we have another layer called the "chromosphere," which extends several thousand miles beyond the photosphere. It is in steady motion and often enormous "prominences" can be seen to burst from it, extending as much as 100,000 miles into space. Outside the chromosphere there is the so-called "corona." The corona consists of very tenuous gases (essentially hydrogen), but it makes a magnificent sight when the sun is eclipsed.

The Moon

The earth is the planet nearest to the sun of all the planets which have moons. The two planets nearer the sun, Mercury and Venus, do not have any moons. The next planet farther out, Mars, has two very small moons. Jupiter has four major moons and presumably many minor ones, of which eight are now known. Saturn, the ringed planet, has nine known moons, of which one (Titan) is larger than the planet Mercury. Uranus has five known moons (four of them large), while Neptune has one large and one small moon. Pluto is moonless and considered by some a "runaway moon" of Neptune.

Our own moon, with a diameter of 2,160 miles, is one of the large moons in our

The Brightest Stars

Star	Constellation	Position, 1950				Mag.	Dist.	l.-y.	Month
		R.A.	Dec.	h	m				
Sirius.....	Canis Major.....	6 42.9	-16 39	6	42.9	-1.6	8	Feb.	Feb.
Canopus.....	Carina.....	6 22.8	-52 40	6	22.8	-0.9	650	Feb.	Feb.
Alpha Centauri.....	Centaurus.....	14 36.2	-60 38	14	36.2	+0.1	4	Jun.	Jun.
Vega.....	Lyra.....	18 35.2	+38 44	18	35.2	0.1	23	Aug.	Aug.
Capella.....	Auriga.....	5 13.0	+45 57	5	13.0	0.2	42	Jan.	Jan.
Arcturus.....	Boötes.....	14 13.4	+19 27	14	13.4	0.2	32	June	June
Rigel.....	Orion.....	5 12.1	- 8 15	5	12.1	0.3	545	Jan.	Jan.
Procyon.....	Canis Minor.....	7 36.7	+ 5 21	7	36.7	0.5	10	Mar.	Mar.
Achernar.....	Eridanus.....	1 35.9	-57 29	1	35.9	0.6	70	Nov.	Nov.
Beta Centauri.....	Centaurus.....	14 0.3	-60 8	14	0.3	0.9	130	June	June
Altair.....	Aquila.....	19 48.3	+ 8 44	19	48.3	0.9	18	Sept.	Sept.
Betelgeuse.....	Orion.....	5 52.5	+ 7 24	5	52.5	0.9	300	Feb.	Feb.
Aldebaran.....	Taurus.....	4 33.0	+16 25	4	33.0	1.1	54	Jan.	Jan.
Spica.....	Virgo.....	13 22.6	-10 54	13	22.6	1.2	190	May	May
Pollux.....	Gemini.....	7 42.3	+28 9	7	42.3	1.2	31	Mar.	Mar.
Antares.....	Scorpius.....	16 26.3	-26 19	16	26.3	1.2	170	July	July
Fomalhaut.....	Piscis Austrinus.....	22 54.9	-29 53	22	54.9	1.3	27	Oct.	Oct.
Deneb.....	Cygnus.....	20 39.7	+45 6	20	39.7	1.3	465	Sept.	Sept.
Regulus.....	Leo.....	10 5.7	+12 13	10	5.7	1.3	70	Apr.	Apr.
Beta Crucis.....	Crux.....	12 44.8	-59 25	12	44.8	1.5	465	May	May
Eta Carinae.....	Carina.....	10 43.1	-59 25	10	43.1	1-7	...	Apr.	Apr.
Alpha-one Crucis.....	Crux.....	12 23.8	-62 49	12	23.8	1.6	150	May	May
Castor.....	Gemini.....	7 31.4	+32 0	7	31.4	1.6	44	Feb.	Feb.
Gamma Crucis.....	Crux.....	12 28.4	-56 50	12	28.4	1.6	...	May	May
Epsilon Canis Majoris.....	Canis Major.....	6 56.7	-28 54	6	56.7	1.6	325	Feb.	Feb.
Epsilon Ursae Majoris.....	Ursa Major.....	12 51.8	+56 14	12	51.8	1.7	50	May	May
Bellatrix.....	Orion.....	5 22.4	+ 6 18	5	22.4	1.7	215	Jan.	Jan.
Lambda Scorpii.....	Scorpius.....	17 30.2	-37 4	17	30.2	1.7	205	July	July
Epsilon Carinae.....	Carina.....	8 21.5	-59 21	8	21.5	1.7	325	May	May
Mira.....	Cetus.....	2 16.8	- 3 12	2	16.8	2-9	250	Dec.	Dec.

solar system and is especially large when compared to the planet around which it goes. In fact the common center of gravity of the earth-moon system is only about 1,000 miles below the earth's surface. The closest our moon can come to us (perigee) is 221,463 miles; the farthest it can go away (apogee) is 252,710 miles. Like all the other moons in our solar system the period of rotation of our moon is equal to its period of revolution around the earth. Hence from earth we can see only one hemisphere of the moon. Both periods are 27 days, 7 hours, 43 minutes and 11.47 seconds. But while the rotation of the moon is regular, its velocity in its orbit is not, since it moves more slowly in apogee than in perigee. Consequently some portions near the rim which are not normally visible will appear briefly. This phenomenon is called "libration," and by taking advantage of the librations astronomers have succeeded in mapping approximately 59 per cent of the lunar surface. The other 41 per cent can never be seen from the earth but should be well mapped by circumlunar camera-carrying rockets within a few years.

Though the moon goes around the earth in the time mentioned, the interval from new moon to new moon is 29 days, 12

hours, 44 minutes and 2.78 seconds. The delay of nearly two days is due to the fact that the earth is moving around the sun so that the moon needs two extra days to reach a spot in its orbit where no part is illuminated by the sun, as seen from earth.

If the plane of the earth's orbit around the sun (the ecliptic) and the plane of the moon's orbit around the earth were the same, the moon would be eclipsed by the earth every time it is full, and the earth would be eclipsed by the moon every time the moon is "new" (it would be better to call it the "black moon" when it is in this position). But because the two orbits do not coincide, the moon's shadow normally misses the earth and the earth's shadow normally misses the moon. The inclination of the two orbital planes to each other is 5 degrees. The tides are, of course, caused by the moon, but in the open ocean they are surprisingly low, amounting to about a yard. The very high tides which are observed near the shore in some places are due to funnelling effects of the shorelines. At new moon and at full moon the tides raised by the moon are re-enforced by the sun; these are the "spring tides." If the sun's tidal raising power does not reinforce that of the moon we get the "neap tides."

Phases of the Moon for 1961

	Date	E. S. T.	C. S. T.	M. S. T.	P. S. T.
JANUARY.....	1	6:06 P	5:06 P	4:06 P	3:06 P
.....	9	10:03 P	9:03 P	8:03 P	7:03 P
.....	16	4:30 P	3:30 P	2:30 P	1:30 P
.....	23	11:14 A	10:14 A	9:14 A	8:14 A
.....	31	1:47 P	0:47 P	11:47 A	10:47 A
FEBRUARY.....	8	11:50 A	10:50 A	9:50 A	8:50 A
.....	15	3:11 A	2:11 A	1:11 A	0:11 A
.....	22	3:35 A	2:35 A	1:35 A	0:35 A
MARCH.....	2	8:35 A	7:35 A	6:35 A	5:35 A
.....	9	9:58 P	8:58 P	7:58 P	6:58 P
.....	16	1:51 P	0:51 P	11:51 A	10:51 A
.....	23	9:49 P	8:49 P	7:49 P	6:49 P
APRIL.....	1	0:48 A	*11:48 P	*10:48 P	*9:48 P
.....	8	5:16 A	4:16 A	3:16 A	2:16 A
.....	15	0:38 A	*11:38 P	*10:38 P	*9:38 P
.....	22	4:50 P	3:50 P	2:50 P	1:50 P
.....	30	1:41 P	0:41 P	11:41 A	10:41 A
MAY.....	7	10:58 A	9:58 A	8:58 A	7:58 A
.....	14	11:55 A	10:55 A	9:55 A	8:55 A
.....	22	11:19 A	10:19 A	9:19 A	8:19 A
.....	29	11:38 P	10:38 P	9:38 P	8:38 P
JUNE.....	5	4:19 P	3:19 P	2:19 P	1:19 P
.....	13	0:17 A	*11:17 P	*10:17 P	*9:17 P
.....	21	4:02 A	3:02 A	2:02 A	1:02 A
.....	28	7:38 A	6:38 A	5:38 A	4:38 A
JULY.....	4	10:33 P	9:33 P	8:33 P	7:33 P
.....	12	2:12 P	1:12 P	0:12 P	11:12 A
.....	20	6:14 P	5:14 P	4:14 P	3:14 P
.....	27	2:51 P	1:51 P	0:51 P	11:51 A
AUGUST.....	3	6:48 A	5:48 A	4:58 A	3:48 A
.....	11	5:36 A	4:36 A	3:36 A	2:36 A
.....	19	5:52 A	4:52 A	3:52 A	2:52 A
.....	25	10:14 P	9:14 P	8:14 P	7:14 P
SEPTEMBER.....	1	6:06 P	5:06 P	4:06 P	3:06 P
.....	9	9:50 P	8:50 P	7:50 P	6:50 P
.....	17	3:24 A	2:24 A	1:24 A	0:24 A
.....	24	6:34 P	5:34 P	4:34 P	3:34 P
OCTOBER.....	1	9:10 A	8:10 A	7:10 A	6:10 A
.....	9	1:53 P	0:53 P	11:53 A	10:53 A
.....	16	11:35 P	10:35 P	9:35 P	8:35 P
.....	23	4:31 P	3:31 P	2:31 P	1:31 P
.....	31	3:59 A	2:59 A	1:59 A	0:59 A
NOVEMBER.....	8	4:59 A	3:59 A	2:59 A	1:59 A
.....	15	7:13 A	6:13 A	5:13 A	4:13 A
.....	22	4:44 A	3:44 A	2:44 A	1:44 A
.....	30	1:19 A	0:19 A	*11:19 P	*10:19 P
DECEMBER.....	7	6:52 P	5:52 P	4:52 P	3:52 P
.....	14	3:06 P	2:06 P	1:06 P	0:06 P
.....	21	7:42 P	6:42 P	5:42 P	4:42 P
.....	29	10:57 P	9:57 P	8:57 P	7:57 P

on the previous day.

Notable Telescopes of the World

Refractor Telescopes

Size in inches	Observatory	Location
40	Yerkes	Williams Bay, Wis.
36	Lick	Mt. Hamilton, Calif.
32.7	Paris (Univ. of)	Meudon, France
31.5	Astrophysical	Potsdam, Germany
30	Allegheny	Pittsburgh, Pa.
30	Bischoffsheim	Nice, France
30	Poulikova	Leningrad, U.S.S.R.

Reflector Telescopes

200	Palomar	Palomar Mt., Calif.
120	Lick	Mt. Hamilton, Calif.
100	Mt. Wilson	Pasadena, Calif.
82	McDonald	Mt. Locke, Texas
74	Dunlap	Richmond Hill, Ont.
72	Lord Ross (dismantled)	Parsonstown, Ireland
72	Dominion Astrophysical	Victoria, B. C.
69	Perkins	Delaware, Ohio
61	Harvard	Harvard, Mass.
60	Bloemfontein	Bloemfontein, U. of S. Af.
60	Mt. Wilson	Pasadena, Calif.
60	Córdoba	Bosque Alegre, Argentina

Radio Telescopes

Diameter in feet	Location	Remarks
250	Jodrell Bank, England	.....
210	St. Mary's, Sydney, Australia	building
142	Palo Alto, Calif.	building
90	Owens Valley, Calif.	(290 ft.)
84	Millstone Hill, Mass.	.....
82	Dwingeloo, Netherlands	.....
82	White Lake, B. C., Canada	building
60	Lebedev Institute, Crimea	.....
40	Table Mesa, Calif.	.....

Eclipses in 1961

In 1961 there will be two eclipses of the sun, neither of which will be visible from the United States, and two eclipses of the moon, both of which will be visible from the United States.

1. *Total eclipse of the sun*, February 15. The path of the eclipse extends from western Africa through northern Europe to the Chinese mainland to the west of Korea.

2. *Partial eclipse of the moon*, March 2. The beginning of this eclipse will be visible in North America except for the East Coast, the Pacific Ocean, Australia and New Zealand, eastern Asia and the North Polar regions. The end of the eclipse will be visible from Alaska.

Moon enters penumbra	5:33.5 A.M., E.S.T.
Moon enters umbra	6:52.4
Middle of the eclipse	8:29.1
Moon leaves umbra	10:05.9
Moon leaves penumbra	11:24.7 A.M.

3. *Annular eclipse of the sun* (sun appears as a luminous ring along the center of the eclipse path) August 11. This eclipse,

which is going to be annular because that day the apparent diameter of moon will be slightly less than the apparent diameter of the sun, will not be seen by many witnesses. Most of the eclipse will be over the South Atlantic Ocean far as land is concerned it will be visible only from the eastern tip of Brazil, that portion of Antarctica below the Antarctic continent.

Partial eclipse of the moon, August 17. The beginning will be visible in minor, Africa, Europe, Atlantic Ocean North America, except West Coast. The end will be visible in western Europe, western Africa, Atlantic Ocean and North America except Alaska.

Moon enters penumbra	3:13.9 A.M., E.S.T.
Moon enters umbra	4:52.7
Middle of the eclipse	6:10.2
Moon leaves umbra	6:41.5
Moon leaves penumbra	8:20.4 A.M.

The Planets

Of the nine known planets of our solar system, two, Mercury and Venus, are around the sun in orbits smaller than that of the earth. Because all planets "shine" by reflected sunlight, these two become visible to us when they are nearest to us. We then see their unilluminated sides. As these planets move away from this position they first appear as sickle crescents and as the sickle widens their brilliance increases. When (as seen from earth) they are as far from the sun as they can get they are said to be at "maximum elongation." Then they approach the sun again, apparently, that is) and become invisible again because of their proximity to the sun.

Mercury, the innermost planet, is rather small in actual size, and though it is a naked-eye object, it is rather difficult to see because even at extreme elongation it is still in a sky illuminated by sunlight though the sun itself will be below the horizon. Venus is the opposite of a small object; it hangs in the sky like a distant searchlight trained at us. As late as a hundred years ago a French warship tried to shoot it down because it was thought to be an enemy balloon, and in recent years Venus has often been reported as a "flying saucer."

Mars, the next planet outside the earth's orbit, will become especially bright when nearest to us because we then see its light side fully illuminated by the sun. This happens roughly every two years or two months, in December 1960 and, the next time after that, in February 1963.

The next major planet is Jupiter. Between the orbits of Mars and Jupiter there are the asteroids and planetoids, a swarm of minor bodies (over 1,500 are known and catalogued) moving in planetary orbits. Jupiter is the largest of the planets.

Planet Table

Mean distance from sun in millions of miles	Period of revolution around the sun	Eccentricity of orbit	Inclination to ecliptic	Diameter	Period of rotation on axis	Inclination of equator to orbit plane	Surface gravity (earth = 1)	Density H ₂ O = 1	Oblateness	Mean velocity in orbit	Max. stellar mag.
			° ' "	miles		°				mi./sec.	
.....	(27 ^d .322)*	0.05	5 8	865,400	24 ^d .64†	7.2	28	1.4	0	.....	-26.7
36.00	87 ^d .969	0.21	7 0	2,160	27 ^d .322	6.7	0.16	3.3	0	0.63	-12.6
67.27	224 ^d .701	0.01	3 24	3,100	88 ^d	7	0.28	3.8	0	30	-1.2
93.00	365 ^d .256	0.02	0 0	7,700	† ‡	?	0.85	5.1	0	22	-4.4
141.71	1 ^y .881	0.09	1 51	7,927	23 ^b 56 ^m	23.4	1.00	5.5	1/297	18.5	.....
483.88	11 ^y .862	0.05	1 18	4,200	24 ^b 37 ^m	25.2	0.38	4.0	1/192	15	-2.8
887.14	29 ^y .458	0.06	2 29	88,700	9 ^b 50 ^m †	3.1	2.6	1.3	1/15	8	-2.5
1783.98	84 ^y .013	0.05	0 46	75,100	10 ^b 14 ^m †	26.8	1.2	0.7	1/9.5	6	-0.4
2795.46	164 ^y .794	0.01	1 46	32,000	10 ^a 4 ^b	98	1.1	1.3	1/14	4	+5.7
3675.27	248 ^y .430	0.25	17 9	27,700	15 ^b .8	29	1.4	2.2	1/40	3	+7.8
				3,600	??	??	??	?	??	<3	+14

of revolution around the earth. † This is the rotation at the equator. ‡ Rotation of Venus is uncertain ably a few weeks. § The equatorial diameters of the earth, Jupiter, and Saturn are given; polar diameters 7,900.0 mi., Jupiter 82,789 mi., Saturn 67,170 mi.
 NOTES: The number of known moons in the solar system is now as follows: for the earth 1; Mars 2; Saturn 9; Uranus 5; Neptune 2.
 DATA ON THE EARTH: Equatorial circumference, 24,902.4 mi.; total area, 196,949,970 sq. mi.; mass, in tons; mean diameter, 7,917.8 mi.

a when nearest the earth is still 600 million miles away. But because its size it may rival Venus in the when near. The next planet to be brighter is Saturn, famous for its size is never an object of overwhelming brightness but will look like a bright star. The next planet, can occasionally be bright enough to be seen with the eye if you know just where to look; it is an object for good field-glasses or small portable telescopes. The next is for Neptune. Pluto, the planet "Neptune," as it is usually called, is approaching the perihelion of its orbit for the rest of this century will be closer to the sun than Neptune. Even Pluto can be seen only with a large

Note: The term "greatest elongation" (East or West) refers to the angular distance (in degrees) of the planet from the sun. Mercury can be seen best with the naked eye or small optical aids such as field glasses when at greatest elongation.

The First 10 Minor Planets

Name	Mag.	Discovery
1. Ceres.....	7.4	1801
2. Pallas.....	8.0	1802
3. Juno.....	8.7	1804
4. Vesta.....	6.5	1807
5. Astraea.....	9.9	1845
6. Hebe.....	8.5	1847
7. Iris.....	8.4	1847
8. Flora.....	8.9	1847
9. Metis.....	8.9	1848
10. Hygiea.....	9.5	1849

The Inner Planets

Venus reaches greatest elongation (E.) at 2 A.M., E.S.T.

Mercury reaches greatest elongation (E.) 18° at 7 A.M., E.S.T.

Venus at max. brilliancy at noon,

Mercury reaches greatest elongation (W.) 28° at 3 P.M., E.S.T.

Venus at max. brilliancy at 3 P.M.,

Mercury reaches greatest elongation (E.) 23° at 11 P.M., E.S.T.

Venus reaches greatest elongation (W.) at 9 P.M., E.S.T.

Mercury reaches greatest elongation (W.) 20° at 4 A.M., E.S.T.

Mercury reaches greatest elongation (E.) 26° at 5 A.M., E.S.T.

Mercury reaches greatest elongation (W.) 19° at 10 A.M., E.S.T.

Comets

The appearance of a large and brilliant comet in the skies cannot be predicted any earlier than 1986 when Halley's comet will approach perihelion (the point of its orbit closest to the sun) again. But a large and brilliant comet is possible at any time. More than 1,000 comets are on the lists now, with several new ones being discovered every year. But while you have a comet visible to the unaided eye almost every year, none of them since the last appearance of Halley's comet in 1910-11 has been conspicuous to a casual watcher.

Since comets appeared in the sky without any warning, people in classical times and especially during the Middle Ages believed that they had a special "meaning," which, of course, was bad. Since a natural

catastrophe of some sort or a military conflict occurs every year, it was quite simple to blame the comet which happened to be visible. But even in the past there were some people who used logical reasoning. When, in Roman times, a comet was blamed for the loss of a battle and hence was called a "bad omen," a Roman writer observed that the victors in the battle probably did not think so.

Up until the middle of the sixteenth century comets were believed to be phenomena of the upper atmosphere; they were usually "explained" as "burning vapors" which had risen from "distant swamps." That nobody had ever actually seen burning vapors rise from a swamp did not matter.

But a large comet which appeared in 1577 was carefully observed by Tycho Brahe, a Danish astronomer who is often, and with the best of reasons, called "eccentric" but who insisted on precise measurements for everything. It was Tycho Brahe's accumulation of literally thousands of precise measurements which later enabled his younger collaborator, Johannes Kepler, to discover the laws of planetary motion. Measuring the motion of the comet of 1577, Tycho Brahe could show that it had been far beyond the atmosphere, even though he could not give figures for the distance. Tycho Brahe's work proved that comets were astronomical and not meteorological phenomena.

In 1682 the first Astronomer Royal of Great Britain, Dr. Edmund Halley, checked the orbit of a bright comet that was in the sky then and compared it with earlier comet orbits which were known in part. Halley found that the comet of 1682 was the third to move through what appeared to be the same orbit. And the three appearances were roughly 76 years apart. Halley concluded that this was the same comet, moving around the sun in a closed orbit, like the planets. He predicted that it would re-appear in 1758 or 1759. Halley himself died in 1742, but a large comet appeared sixteen years after his death as predicted and was immediately referred to as "Halley's comet."

Astronomers refer to comets as "periodic" or as "non-periodic" comets, but the latter term does not mean that these comets have no period; it merely means that their period is not known. The actual periods of comets run from 3.3 years (the shortest known) to several thousand years. Their orbits are elliptical, like those of the planets, but they are very eccentric, long and narrow ellipses. Only comet Schwassmann-Wachmann has an orbit which has such a low eccentricity (for a cometary orbit) that it could be the orbit of a minor planet.

When a comet, coming from deep space,

approaches the sun, it is at first indistinguishable from a minor planet. Somewhere between the orbits of Mars and Jupiter, the outline becomes fuzzy; it is said to develop a "coma" (the word used here is the Latin word *coma*, which means "hair," not the phonetically identical Greek word which means "deep sleep"). Then, near the orbit of Mars, the comet develops its tail, which at first trails behind. This grows steadily as the comet comes closer and closer to the sun. As it rounds the sun (as first pointed out by Johannes Kepler) the tail always points away from the sun so that the comet, when moving away from the sun, points its tail ahead like the landing gear of an airplane.

The reason for this behavior is that the tail is pushed in these directions by the radiation pressure of the sun. It sometimes happens that a comet loses its tail at perihelion; it then grows another. Although the tail is clearly visible against the black of the sky, it is very tenuous. It has been said that if the tail of Halley's comet could be compressed to the density of iron, it would fit into a small suitcase.

The chemical make-up of comets has been explained by Fred L. Whipple. Comets are enormous "snowballs" of frozen gases (mostly carbon dioxide, methane, marsh gas, water vapor, etc.) containing very little solid material. The whole behavior of a comet, therefore, is explainable as the behavior of a ball of frozen gas being heated by the sun.

20 Famous Comets

Year and no.	Name of comet	Period in years
1744	De Chéseaux's Comet.....	
1806	Biela's Comet.....	
1811 I	Great Comet of 1811.....	30
1812	Di Vico's Comet.....	
1815	Olbers' Comet.....	
1819 I	Encke's Comet.....	
1819	Pons-Winnecke Comet.....	
1835 III	Halley's Comet.....	5
1843 I	Great Comet of 1843.....	102,000
1844 II	Great Comet of 1844.....	2,800,000
1858 VI	Donati's Comet.....	2,800,000
1864 II	Great Comet of 1864.....	6,000
1871 III	Tuttle's Comet.....	
1874 III	Coggia's Comet.....	
1879	Brorsen's Comet.....	
1881 II	Tebbutt's Comet.....	
1889 VI	Swift's 2nd Comet.....	
1892 III	Holmes' Comet.....	
1923	d'Arrest's Comet.....	
1925 II	Comet Schwassmann-Wachmann.....	

The Auroras

The "northern lights" (*Aurora borealis*) as well as the "southern lights" (*Aurora australis*) are upper-atmosphere phenomena but of astronomical origin. The auroras center around the magnetic north

Morning and Evening Stars and Planets in 1961

MERCURY

star, Jan. 1 to Jan. 5
 star, Jan. 5 to Feb. 21
 star, Feb. 21 to May 1
 star, May 1 to June 27
 star, June 27 to Aug. 14
 star, Aug. 14 to Oct. 22
 star, Oct. 22 to Dec. 16
 star, Dec. 16 to Dec. 31

VENUS

star, April 10 to Dec. 31
 star, Jan. 1 to April 10

MARS

star, Dec. 14 to Dec. 31
 star, Jan. 1 to Dec. 14

JUPITER

Morning star, Jan. 5 to July 25
 Evening star, Jan. 1 to Jan. 5
 July 25 to Dec. 31

SATURN

Morning star, Jan. 11 to July 19
 Evening star, Jan. 1 to Jan. 11
 July 19 to Dec. 31

URANUS

Morning star, Jan. 1 to Feb. 12
 Evening star, Feb. 12 to Aug. 19
 Morning star, Aug. 19 to Dec. 31

ical) poles of the earth, which why, in the Western Hemisphere, have been seen as far to the south as Kansas or Florida while the equivalent in the eastern hemisphere is an aurora. The northern magnetic happens to be in the Western Hemisphere.

Upper limit of an aurora is at about 400 miles, but this figure is an estimate, not a measurement. Since there is a connection between the aurora and the sun spots has been established and has gradually come to be known. It was said that the sunspots eject "particles" (later the word was substituted) which on striking the earth's atmosphere, cause the aurora. This explanation suffered from many difficulties. Sometimes a very large group on the sun, with individual spots larger than the earth itself, would cause an aurora. Moreover, even if a group caused an aurora, the time that elapsed between the appearance of the one and the occurrence of the other was highly variable.

In addition to these two theoretical difficulties there was a practical one. If an aurora was the result of earth being hit by a stream of electrons from the sun, the aurora should, of course, be "bipolar," that is it should appear near both the North and South Poles simultaneously. A practical difficulty here was that when the North Pole has winter and darkness, the South Pole has summer and bright light. So that an aurora australis, if it were the one, would simply be invisible to the sun shining in the southern sky at the time.

A practical problem has been solved by the use of an instrument especially designed for the International Geophysical Year. The answer was affirmative; auroras are bipolar. The other problem of the time

lag is, in all probability, answered by the discovery of the Van Allen layer by artificial satellite *Explorer I*. The Van Allen layer is a double layer of charged subatomic particles around the earth. The inner layer, with its center some 1,500 miles from the ground, reached from about 40° N. to about 40° S. and does not touch the atmosphere. The outer layer, much larger and with its center several thousand miles from the ground, does touch the atmosphere in the vicinity of the magnetic poles.

It seems probable that the "leakage" of electrons from the outer Van Allen layer causes the auroras. A new burst of electrons from the sun seems to be caught in the outer layer first. Under the assumption that all electrons are first caught in the outer layer, the time lag can be understood. There has to be an "overflow" from the outer layer to produce an aurora.

Meteors and Meteorites

The term "meteor" for what is usually called a "shooting star" bears an unfortunate resemblance to the term "meteorology," the science of weather and weather forecasting. This resemblance is due to an ancient misunderstanding which wrongly considered meteors an atmospheric phenomenon. Actually the streak of light in the sky which scientists call a meteor is essentially an astronomical phenomenon: the entry of a small piece of cosmic matter into our atmosphere.

The distinction between "meteors" and "fireballs" (formerly also called "bolides") is merely one of convenience; a fireball is an unusually bright meteor. Incidentally, it also means that a fireball is larger than a faint meteor. A bright fireball produces enough light to see by and may light up the night landscape like the full moon.

Bodies which enter our atmosphere become visible when they are about 60 miles above the ground. The fact that they grow

hot enough to emit light is not due to the "friction" of the atmosphere, as one can often read. The phenomenon responsible for the heating is one of compression. Since unconfined air cannot move faster than the speed of sound but the entering meteorite moves with 30 to 60 times the speed of sound, the air simply cannot get out of the way. Therefore it is compressed like the air in the cylinder of a Diesel engine and is heated by compression. This heat—or part of it—is transferred to the moving body. The details of this process are now fairly well understood as a result of re-entry tests with ballistic-missile nose cones.

The average weight of a body producing a faint "shooting star" is only a small fraction of an ounce. Even a bright fireball may not weigh more than 2 or 3 pounds. Naturally the smaller bodies are worn to dust by the passage through the atmosphere; only rather large ones reach the ground. Those that are found are called meteorites. (The "meteor," to repeat, is the term for the light streak in the sky.)

The largest meteorite known is still imbedded in the ground near Grootfontein in SW Africa and is estimated to weigh 70 tons. The second largest known is the 34-ton Anighito (on exhibit in the Hayden Planetarium, New York), which was found by Admiral Peary at Cape York in Greenland. The largest meteorite found in the United States is the Willamette meteorite (found in Oregon, weight ca. 15 tons), but large portions of this meteorite weathered away before it was found and its weight as it struck the ground may have been 20 tons.

All these are iron meteorites (an iron meteorite normally contains about 7 per cent nickel), which form one class of meteorites. The other class are the stony meteorites and between them there are the so-called "stony irons." The so-called "Tektites" consist of glass similar to our volcanic glass obsidian, and because of the similarity there is doubt in a number of cases whether the glass is of terrestrial or of extra-terrestrial origin.

Though no meteorite larger than the Grootfontein is actually known, we do know that the earth has, on occasion, been struck by much larger bodies. Evidence for such hits are the meteorite craters, of which an especially good example is located near the Cañon Diablo in Arizona. Another meteor crater in the United States is a rather old crater near Odessa, Texas. A large number of others are known, but some of them have not actually been proved to be meteoritic in origin, as for example Lake Bosumtwi in West Africa.

The meteor showers are caused by multitudes of very small bodies travelling in

swarms; these showers, though most spectacular on occasion, do not seem to contain large pieces.

Important Meteor Showers

Date	Meteor stream	Radiant const.
Jan. 1-4	Quadrantids.....	Boö
Feb. 5-10	Alpha Aurigids.....	Aur
Mar. 10-12	Zeta Boötids.....	Boö
Apr. 19-23	Lyrids.....	Her
May 1-6	May Aquarids.....	Aqua
May 30	Eta Pegasids.....	Pega
June 27-30	Pons-Winnecke meteors.....	Draco
July 14	Alpha Cygnids.....	Cygn
July 26-31	Delta Aquarids.....	Aqua
Aug. 10-14	Perseids.....	Cassio
Aug. 10-20	Kappa Cygnids.....	Cygn
Aug. 21-31	Zeta Draconids.....	Dracon
Sept. 22	Alpha Aurigids.....	Aurig
Oct. 2	Quadrantids.....	Boöte
Oct. 9	Giacobinids.....	Draco
Oct. 18-23	Orionids.....	Orion
Nov. 14-18	Leonids.....	Leo
Dec. 10-13	Geminids.....	Gemini

The Atmosphere

Astronomically speaking, the present our atmosphere is deplorable. Though sonably transparent to visible light, the atmosphere may absorb as much as 60 per cent of the visible and near-visible light. It is opaque to most other wavelengths, except certain fairly short radio waves. In addition to absorbing much light, our atmosphere bends light rays entering sideways (for a given observer) so that the position of a star not too high above horizon is not what it seems to be. The effect is that we see the sun above horizon before it actually is. And the steady movement of the atmosphere causes the "twinkling" of the stars, which may be romantic but is a nuisance when it comes to observing. On "bad" nights the image of a star may jump out of the narrow field of vision of a telescope.

The composition of our atmosphere at the ground is 78 per cent nitrogen and 21 per cent oxygen, the remaining 1 per cent consisting of other gases, most of it argon. The composition stays the same to an altitude of at least 70 miles (except for higher up two impurities, carbon dioxide and water vapor, are missing) but pressure drops very fast. At 18,000 feet, half of the total mass of the atmosphere is below, and at 100,000 feet, 99 per cent is below. The mass of the atmosphere is below the upper limit of the atmosphere is usually given as 120 miles; no definitive figure is possible, since there is no boundary between the incredibly attenuated atmosphere and space.

Longitude and Latitude of Foreign Cities and Time Corresponding to 12:00 Noon, E.S.T.

City	Long.	Lat.	Time	City	Long.	Lat.	Time
Scotland.....	2 9 w	57 9 n	5:00 p.m.	Lima, Peru.....	77 2 w	12 0 s	12:00 noon
Australia.....	138 36 e	34 55 s	2:30 a.m.*	Lisbon, Portugal.....	9 9 w	38 44 n	5:00 p.m.
Algeria.....	3 0 e	36 50 n	5:00 p.m.	Liverpool, England.....	3 0 w	53 25 n	5:00 p.m.
Amsterdam, Netherlands.....	4 53 e	52 22 n	6:00 p.m.	London, England.....	0 5 w	51 32 n	5:00 p.m.
Ankara, Turkey.....	32 55 e	39 55 n	7:00 p.m.	Lyon, France.....	4 50 e	45 45 n	6:00 p.m.
Asunción, Paraguay.....	57 40 w	25 15 s	1:00 p.m.	Madrid, Spain.....	3 42 w	40 26 n	6:00 p.m.
Batavia, Java.....	23 43 e	37 58 n	7:00 p.m.	Makassar, Celebes.....	119 30 e	5 9 s	1:00 a.m.*
Christchurch, New Zealand.....	174 45 e	36 52 s	5:00 a.m.*	Manchester, England.....	2 15 w	53 30 n	5:00 p.m.
Bangkok, Thailand.....	100 30 e	13 45 n	0:00 a.m.*	Manila, Philippines.....	120 57 e	14 35 n	1:00 a.m.*
Barcelona, Spain.....	2 9 e	41 23 n	6:00 p.m.	Marseille, France.....	5 20 e	43 20 n	6:00 p.m.
Buenos Aires, Argentina.....	48 29 w	1 28 s	2:00 p.m.	Mazatlán, Mexico.....	106 25 w	23 12 n	10:00 a.m.
Cairo, Egypt.....	5 56 w	54 37 n	5:00 p.m.	Mecca, Saudi Arabia.....	39 45 e	21 29 n	8:00 p.m.
Belgrade, Yugoslavia.....	20 32 e	44 52 n	6:00 p.m.	Melbourne, Australia.....	144 58 e	37 47 s	3:00 a.m.*
Bombay, India.....	13 25 e	52 30 n	6:00 p.m.	Mexico City, Mexico.....	99 7 w	19 26 n	11:00 a.m.
Bombay, India.....	1 55 w	52 25 n	5:00 p.m.	Milan, Italy.....	9 10 e	45 27 n	6:00 p.m.
Bombay, India.....	74 15 w	4 32 n	12:00 noon	Montevideo, Uruguay.....	56 10 w	34 53 s	2:00 p.m.
Bombay, India.....	72 48 e	19 0 n	9:30 p.m.	Moscow, U.S.S.R.....	37 36 e	55 45 n	8:00 p.m.
Bombay, India.....	0 31 w	44 50 n	6:00 p.m.	Munich, Germany.....	11 35 e	48 8 n	6:00 p.m.
Bombay, India.....	8 49 e	53 5 n	6:00 p.m.	Nagasaki, Japan.....	129 57 e	32 48 n	2:00 a.m.*
Bombay, India.....	153 8 e	27 29 s	3:00 a.m.*	Nagoya, Japan.....	136 56 e	35 7 n	2:00 a.m.*
Bombay, India.....	2 35 w	51 28 n	5:00 p.m.	Nairobi, Kenya.....	36 55 e	1 25 n	8:00 p.m.
Bombay, India.....	4 22 e	50 52 n	6:00 p.m.	Nanking, China.....	118 53 e	32 3 n	1:00 a.m.*
Bombay, India.....	26 7 e	44 25 n	7:00 p.m.	Naples, Italy.....	14 15 e	40 50 n	6:00 p.m.
Bombay, India.....	19 5 e	47 30 n	6:00 p.m.	Newcastle-on-Tyne, Eng.....	1 37 w	54 58 n	5:00 p.m.
Bombay, India.....	58 22 w	34 35 s	2:00 p.m.	Odessa, U.S.S.R.....	30 48 e	46 27 n	8:00 p.m.
Bombay, India.....	31 21 e	30 2 n	7:00 p.m.	Osaka, Japan.....	135 30 e	34 32 n	2:00 a.m.*
Bombay, India.....	88 24 e	22 34 n	9:30 p.m.	Oslo, Norway.....	10 42 e	59 57 n	6:00 p.m.
Bombay, India.....	113 15 e	23 7 n	1:00 a.m.*	Panamá City, Panamá.....	79 32 w	8 58 n	12:00 noon
Bombay, India.....	18 22 e	33 55 s	7:00 p.m.	Paramaribo, Surinam.....	55 15 w	5 45 n	12:30 p.m.
Bombay, India.....	67 2 w	10 28 n	11:30 p.m.	Paris, France.....	2 20 e	48 48 n	6:00 p.m.
Bombay, India.....	52 18 w	4 49 n	1:30 p.m.	Peiping, China.....	116 25 e	39 55 n	1:00 a.m.*
Bombay, India.....	106 5 w	28 37 n	11:00 a.m.	Perth, Australia.....	115 52 e	31 57 s	1:00 a.m.*
Bombay, India.....	106 34 e	29 46 n	0:00 a.m.*	Plymouth, England.....	4 5 w	50 25 n	5:00 p.m.
Bombay, India.....	12 34 e	55 40 n	6:00 p.m.	Port Moresby, Papua Ter.....	147 8 e	9 25 s	3:00 a.m.*
Bombay, India.....	64 10 w	31 28 s	2:00 p.m.	Prague, Czechoslovakia.....	14 26 e	50 5 n	6:00 p.m.
Bombay, India.....	17 28 w	14 40 n	4:00 p.m.	Rangoon, Burma.....	96 0 e	16 50 n	11:30 p.m.
Bombay, India.....	130 51 e	12 28 s	2:30 a.m.*	Reykjavik, Iceland.....	21 58 w	64 4 n	4:00 p.m.
Bombay, India.....	6 15 w	53 20 n	5:00 p.m.	Rio de Janeiro, Brazil.....	43 12 w	22 57 s	2:00 p.m.
Bombay, India.....	30 53 e	29 53 s	7:00 p.m.	Rome, Italy.....	12 27 e	41 54 n	6:00 p.m.
Bombay, India.....	3 10 w	55 55 n	5:00 p.m.	Santiago, Chile.....	70 45 w	33 28 s	1:00 p.m.
Bombay, India.....	8 41 e	50 7 n	6:00 p.m.	São Paulo, Brazil.....	46 31 w	23 31 s	2:00 p.m.
Bombay, India.....	58 15 w	6 45 n	1:15 p.m.	São Salvador, Brazil.....	38 27 w	12 56 s	2:00 p.m.
Bombay, India.....	4 15 w	55 50 n	5:00 p.m.	Shanghai, China.....	121 28 e	31 10 n	1:00 a.m.*
Bombay, India.....	90 31 w	14 37 n	11:00 a.m.	Singapore, British Malaya.....	103 55 e	1 14 n	0:30 a.m.*
Bombay, India.....	79 56 w	2 10 s	12:00 noon	Sofia, Bulgaria.....	23 20 e	42 40 n	7:00 p.m.
Bombay, India.....	10 2 e	53 33 n	6:00 p.m.	Stockholm, Sweden.....	18 3 e	59 17 n	6:00 p.m.
Bombay, India.....	23 38 e	70 38 n	6:00 p.m.	Sydney, Australia.....	151 0 e	34 0 s	3:00 a.m.*
Bombay, India.....	82 23 w	23 8 n	12:00 noon	Tanarive, Madagascar.....	47 33 e	18 50 s	8:00 p.m.
Bombay, India.....	25 0 e	60 10 n	7:00 p.m.	Teheran, Iran.....	51 45 e	35 45 n	8:30 p.m.
Bombay, India.....	147 19 e	42 52 s	3:00 a.m.*	Tokyo, Japan.....	139 45 e	35 40 n	2:00 a.m.*
Bombay, India.....	70 7 w	20 10 s	1:00 p.m.	Tripoli, Libya.....	13 12 e	32 57 n	6:00 p.m.
Bombay, India.....	104 20 e	52 30 n	1:00 a.m.*	Venice, Italy.....	12 20 e	45 26 n	6:00 p.m.
Bombay, India.....	106 48 e	6 16 s	0:30 a.m.*	Veracruz, Mexico.....	96 10 w	19 10 n	11:00 a.m.
Bombay, India.....	43 3 e	11 30 s	8:00 p.m.	Vienna, Austria.....	16 20 e	48 14 n	6:00 p.m.
Bombay, India.....	28 4 e	26 12 s	7:00 p.m.	Vladivostok, U.S.S.R.....	132 0 e	43 10 n	3:00 a.m.*
Bombay, India.....	76 49 w	17 59 n	12:00 noon	Warsaw, Poland.....	21 0 e	52 14 n	6:00 p.m.
Bombay, India.....	68 22 w	16 27 s	1:00 p.m.	Wellington, New Zealand.....	174 47 e	41 17 s	5:00 a.m.*
Bombay, India.....	1 30 w	53 45 n	5:00 p.m.	Zürich, Switzerland.....	8 31 e	47 21 n	6:00 p.m.
Bombay, India.....	30 18 e	59 56 n	8:00 p.m.				
Bombay, India.....	15 17 e	4 18 s	8:00 p.m.				

Longitude, Latitude, Time and Magnetic Declination of U. S. and Canadian Cities

The last column shows the magnetic declination or angle which the magnetic meridian makes with the (geographic) meridian. The value being marked w or e, the north end of the compass needle points west or east respectively of true north by that number of degrees.

City	Long. w.	Lat. n.	Time*	Dec.	City	Long. w.	Lat. n.	Time*
	° /	° /		°		° /	° /	
Albany, N. Y.	73 45	42 40	12:00 noon	13 w	Memphis, Tenn.	90 3	35 9	11:00 a.m.
Amarillo, Tex.	101 50	35 11	11:00 a.m.	12 e	Miami, Fla.	80 12	25 46	12:00 noon
Anchorage, Alaska	149 54	61 13	7:00 a.m.	—	Milwaukee, Wis.	87 55	43 2	11:00 a.m.
Atlanta, Ga.	84 23	33 45	12:00 noon	2 e	Minneapolis, Minn.	93 14	44 59	11:00 a.m.
Atlantic City, N. J.	74 25	39 22	12:00 noon	10 w	Mobile, Ala.	88 3	30 42	11:00 a.m.
Austin, Nev.	117 4	39 29	9:00 a.m.	18 e	Montgomery, Ala.	86 18	32 21	11:00 a.m.
Baker, Oreg.	117 50	44 47	9:00 a.m.	21 e	Montpelier, Vt.	72 32	44 15	12:00 noon
Baltimore, Md.	76 38	39 18	12:00 noon	8 w	Montreal, Que.	73 35	45 30	12:00 noon
Bangor, Maine	68 47	44 48	12:00 noon	19 w	Moose Jaw, Sask.	105 31	50 37	10:00 a.m.
Birmingham, Ala.	86 50	33 30	11:00 a.m.	3 e	Nashville, Tenn.	86 47	36 10	11:00 a.m.
Bismarck, N. Dak.	100 47	46 48	11:00 a.m.	14 e	Needles, Calif.	114 36	34 50	9:00 a.m.
Boise, Idaho	116 13	43 36	10:00 a.m.	19 e	Nelson, B. C.	117 17	49 30	9:00 a.m.
Boston, Mass.	71 5	42 21	12:00 noon	15 w	New Haven, Conn.	72 55	41 19	12:00 noon
Buffalo, N. Y.	78 50	42 55	12:00 noon	7 w	New Orleans, La.	90 4	29 57	11:00 a.m.
Calgary, Alta.	114 1	51 1	10:00 a.m.	23 e	New York, N. Y.	73 58	40 47	12:00 noon
Carlsbad, N. Mex.	104 15	32 26	10:00 a.m.	13 e	Nogales, Ariz.	110 56	31 21	10:00 a.m.
Charleston, S. C.	79 56	32 47	12:00 noon	2 w	Nome, Alaska	165 30	64 25	6:00 a.m.
Charleston, W. Va.	81 38	38 21	12:00 noon	2 w	North Platte, Nebr.	100 46	41 8	11:00 a.m.
Charlotte, N. C.	80 50	35 14	12:00 noon	2 w	Oklahoma City, Okla.	97 28	35 26	11:00 a.m.
Cheyenne, Wyo.	104 52	41 9	10:00 a.m.	15 e	Ottawa, Ont.	75 43	45 24	12:00 noon
Chicago, Ill.	87 37	41 50	11:00 a.m.	2 e	Philadelphia, Pa.	75 10	39 57	12:00 noon
Cincinnati, Ohio	84 30	39 8	12:00 noon	1 e	Phoenix, Ariz.	112 4	33 29	10:00 a.m.
Cleveland, Ohio	81 37	41 28	12:00 noon	5 w	Pierre, S. Dak.	100 21	44 22	11:00 a.m.
Columbia, S. C.	81 2	34 0	12:00 noon	1 w	Pittsburgh, Pa.	79 57	40 27	12:00 noon
Columbus, Ohio	83 1	40 0	12:00 noon	2 w	Port Arthur, Ont.	89 17	48 30	12:00 noon
Dallas, Tex.	96 46	32 46	11:00 a.m.	9 e	Portland, Maine	70 15	43 40	12:00 noon
Denver, Colo.	105 0	39 45	10:00 a.m.	14 e	Portland, Oreg.	122 41	45 31	9:00 a.m.
Des Moines, Iowa	93 37	41 35	11:00 a.m.	7 e	Providence, R. I.	71 24	41 50	12:00 noon
Detroit, Mich.	83 3	42 20	12:00 noon	3 w	Quebec, Que.	71 11	46 49	12:00 noon
Dubuque, Iowa	90 40	42 31	11:00 a.m.	5 e	Raleigh, N. C.	78 39	35 46	12:00 noon
Duluth, Minn.	92 5	46 49	11:00 a.m.	7 e	Reno, Nev.	119 49	39 30	9:00 a.m.
Eastport, Maine	67 0	44 54	12:00 noon	21 w	Richfield, Utah	112 5	38 46	10:00 a.m.
El Centro, Calif.	115 33	32 38	9:00 a.m.	15 e	Richmond, Va.	77 29	37 33	12:00 noon
El Paso, Tex.	106 29	31 46	11:00 a.m.	13 e	Roanoke, Va.	79 57	37 17	12:00 noon
Eugene, Oreg.	123 5	44 3	9:00 a.m.	22 e	Sacramento, Calif.	121 30	38 35	9:00 a.m.
Fargo, N. Dak.	96 48	46 52	11:00 a.m.	10 e	St. John, N. B.	66 10	45 18	1:00 p.m.
Flagstaff, Ariz.	111 41	35 13	10:00 a.m.	15 e	St. Louis, Mo.	90 12	38 35	11:00 a.m.
Fresno, Calif.	119 48	36 44	9:00 a.m.	17 e	Salmon, Idaho	113 54	45 11	10:00 a.m.
Garden City, Kans.	100 53	37 58	10:00 a.m.	13 e	Salt Lake City, Utah	111 54	40 46	10:00 a.m.
Grand Junction, Colo.	108 33	39 5	10:00 a.m.	15 e	San Antonio, Tex.	98 33	29 23	11:00 a.m.
Grand Rapids, Mich.	85 40	42 58	11:00 a.m.	1 e	San Diego, Calif.	117 10	32 42	9:00 a.m.
Havre, Mont.	109 43	48 33	10:00 a.m.	20 e	San Francisco, Calif.	122 26	37 47	9:00 a.m.
Helena, Mont.	112 2	46 35	10:00 a.m.	19 e	San Juan, P. R.	66 10	18 30	1:00 p.m.
Honolulu, Hawaii	157 50	21 18	7:00 a.m.	—	Santa Fe, N. Mex.	105 57	35 41	10:00 a.m.
Hoquiam, Wash.	123 54	46 59	9:00 a.m.	23 e	Sault Ste. Marie, Mich.	84 21	46 30	11:00 a.m.
Hot Springs, Ark.	93 3	34 31	11:00 a.m.	8 e	Savannah, Ga.	81 5	32 5	12:00 noon
Idaho Falls, Idaho	112 1	43 30	10:00 a.m.	18 e	Scranton, Pa.	75 39	41 24	12:00 noon
Indianapolis, Ind.	86 10	39 46	11:00 a.m.	1 e	Seattle, Wash.	122 20	47 37	9:00 a.m.
Jackson, Miss.	90 12	32 20	11:00 a.m.	7 e	Shreveport, La.	93 42	32 28	11:00 a.m.
Jacksonville, Fla.	81 40	30 22	12:00 noon	1 e	Sioux Falls, S. Dak.	96 44	43 33	11:00 a.m.
Juneau, Alaska	134 24	58 18	9:00 a.m.	—	Sitka, Alaska	135 15	57 10	9:00 a.m.
Kansas City, Mo.	94 35	39 6	11:00 a.m.	9 e	Spokane, Wash.	117 26	47 40	9:00 a.m.
Key West, Fla.	81 48	24 33	12:00 noon	3 e	Springfield, Ill.	89 38	39 48	11:00 a.m.
Kingston, Ont.	76 30	44 15	12:00 noon	12 w	Springfield, Mass.	72 34	42 6	12:00 noon
Klamath Falls, Oreg.	121 44	42 10	9:00 a.m.	19 e	Springfield, Mo.	93 17	37 13	11:00 a.m.
Knoxville, Tenn.	83 56	35 57	11:00 a.m.	0	Syracuse, N. Y.	76 8	43 2	12:00 noon
Lander, Wyo.	108 40	42 50	10:00 a.m.	17 e	Tampa, Fla.	82 27	27 57	12:00 noon
Las Vegas, Nev.	115 12	36 10	9:00 a.m.	16 e	Toronto, Ont.	79 24	43 40	12:00 noon
Lewiston, Idaho	117 2	46 24	9:00 a.m.	21 e	Trinidad, Colo.	104 30	37 10	10:00 a.m.
Lincoln, Nebr.	96 40	40 50	11:00 a.m.	10 e	Victoria, B. C.	123 21	48 25	9:00 a.m.
London, Ont.	81 34	43 2	12:00 noon	5 w	Watertown, N. Y.	75 55	43 58	12:00 noon
Los Angeles, Calif.	118 15	34 3	9:00 a.m.	16 e	Wichita, Kans.	97 17	37 43	11:00 a.m.
Louisville, Ky.	85 46	38 15	11:00 a.m.	1 e	Wilmington, N. C.	77 57	34 14	12:00 noon
Manchester, N. H.	71 30	43 0	12:00 noon	16 w	Winnipeg, Man.	97 7	49 54	11:00 a.m.

* Corresponding to 12:00 noon, E.S.T.

Perpetual Calendar 1800-2000 A.D.

month	Jan. Oct.	Apr. Jul. Jan.	Sept. Dec.	Jun.	Feb. Mar. Nov.	Aug. Feb.	May	
22 29.....	A	B	C	D	E	F	G	Mon.
23 30.....	G	A	B	C	D	E	F	Tue.
24 31.....	F	G	A	B	C	D	E	Wed.
25.....	E	F	G	A	B	C	D	Thur.
26.....	D	E	F	G	A	B	C	Fri.
27.....	C	D	E	F	G	A	B	Sat.
28.....	B	C	D	E	F	G	A	Sun.
EXAMPLES	.....	.....	1800	1801	1802	1803	.....
	1804	1805	1806	1807	.....	1808	1809	
	1810	1811	.....	1812	1813	1814	1815	
	.....	1816	1817	1818	1819	.....	1820	
	1821	1822	1823	.....	1824	1825	1826	
	1827	.....	1828	1829	1830	1831	.....
	Nov. 20, 1891, to find the day of under Nov., opposite 20, is G. In the n, opposite G is Fri., <i>ans.</i>	1832	1833	1834	1835	.....	1836	1837
	1838	1839	.....	1840	1841	1842	1843	
	.....	1844	1845	1846	1847	.....	1848	
	1849	1850	1851	.....	1852	1853	1854	
Fri., Oct. —, 1868, to find the pos- of the month. In the 1868 column, is G. Under Oct., G gives 2, 9, 16, ., the Fridays of Oct., 1868.	1855	.....	1856	1857	1858	1859	.....
Mon., — 5, 1811, to find the pos- s. In the 1811 column, opposite Opposite 5, B gives Aug., the only r month available, <i>ans.</i>	1860	1861	1862	1863	.....	1864	1865	
	1866	1867	.....	1868	1869	1870	1871	
	.....	1872	1873	1874	1875	.....	1876	
	1877	1878	1879	.....	1880	1881	1882	
	1883	.....	1884	1885	1886	1887	.....
	1888	1889	1890	1891	.....	1892	1893	
	1894	1895	.....	1896	1897	1898	1899	
	1900	1901	1902	1903	.....	1904	1905	
	1906	1907	.....	1908	1909	1910	1911	
	.....	1912	1913	1914	1915	.....	1916	
Sat., Feb. 29, —, to find the pos- Under Feb., leap-year, opposite 29, e Sat. F gives leap-years 1812, 1840 etc., <i>ans.</i>	1917	1918	1919	.....	1920	1921	1922	
In leap-years (those shown in the Jan. and Feb. in italics, but do for common years. The years 1800 are not leap-years; 2000 will be a	1923	.....	1924	1925	1926	1927	.....
	1928	1929	1930	1931	.....	1932	1933	
	1934	1935	.....	1936	1937	1938	1939	
	.....	1940	1941	1942	1943	.....	1944	
	1945	1946	1947	.....	1948	1949	1950	
	1951	.....	1952	1953	1954	1955	.....
	1956	1957	1958	1959	.....	1960	1961	
	1962	1963	.....	1964	1965	1966	1967	
	.....	1968	1969	1970	1971	.....	1972	
	1973	1974	1975	.....	1976	1977	1978	
	1979	.....	1980	1981	1982	1983	.....
	1984	1985	1986	1987	.....	1988	1989	
	1990	1991	.....	1992	1993	1994	1995	
	.....	1996	1997	1998	1999	.....	2000	

Symbols		The Zodiac and Average Date of Sun Entering					
		Sign		Constel- lation	Sign		Constel- lation
♃ Jupiter	☾ occultation	Aries	Mar. 21	Apr. 18	Libra	Sept. 23	Oct. 31
♄ Saturn	♅ opposition	Taurus	Apr. 20	May 14	Scorpius	Oct. 23	Nov. 23
♅ Uranus	● new moon	Gemini	May 21	June 21	[Ophiuchus]		Nov. 29
♆ Neptune	☾ first quarter	Cancer	June 21	July 20	Sagittarius	Nov. 22	Dec. 17
♇ Pluto	○ full moon	Leo	July 23	Aug. 10	Capricornus	Dec. 22	Jan. 19
♌ conjunction	☾ last quarter	Virgo	Aug. 23	Sept. 16	Aquarius	Jan. 20	Feb. 16
					Pisces	Feb. 19	Mar. 11

1960 JANUARY

S	M	T	W	T	F	S
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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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1961 JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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NOVEMBER

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DECEMBER

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1962 JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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$\frac{23}{24}$	24	25	26	27	28	29

Russian Missiles

Name	Length (ft.)	Take-off Weight (lbs.)	Range (miles)	Fuel	Take-off Thrust (lbs.)	Number of stages
-GROUND:						
.....	50	38,000	600-700	Liquid	70,000	one
.....	85-91	110,000	1,500	Liquid	200,000	two
.....	ca. 90	240,000	5,000	Liquid	500,000	two
.....	ca. 110	260,000	6,000	Liquid	750,000	two
.....	ca. 120	360,000	7,500	Liquid	1,000,000	three
.....	53	.....	1,000	Liquid	.....	two
.....	121	230,000	10,000	Liquid	360,000	three
.....	36	.....	50-100	Solid	.....	three
.....	31	6,000	15-25	Solid	.....	one
.....	30	10,000	50-100	Solid	.....	one
-AIR:						
.....	.....	.....	20-25	Solid	.....	two
.....	13	.....	ca. 20	S/L	.....	two
.....	25	.....	ca. 20	Solid	.....	two
ETS⁷						
.....	54	23,000	400	Liquid	40,000	one
.....	60	.....	1,200	Liquid	.....	one
.....	ca. 20	ca. 3,000	20	Solid	.....	one
.....	.....	ca. 6,000	45	Solid	.....	one
.....	.....	.....	100	Solid	.....	one
.....	.....	.....	600	Solid	.....	one

¹ The T-4 missile seems to consist of the upper stages of the T-4A. Both T-4 and T-4A are experimental. ² T-4A is a winged missile (wing span 66 ft.) for winged re-entry which greatly extends the total adaptated from a rail sled for take-off. ³ T-5 is designed to be launched in salvos. ⁴ T-5B is about the *Honest John*, unguided. ⁵ Is fired from multiple launchers. ⁶ Missile has liquid fuel, its booster uses The term "Navy Rockets" means Navy developments, some are also used by the Russian Army. ⁷ Golem II are designed to be fired from capsules towed by submarines, Golem III and Golem IV are opera-surface vessels though intended to be fired by submerged submarines. ⁸ Komet I and Komet II are in Army, program for adapting them to submarines is underway. The missile called Komet D is to be fired against ground targets, it is turbojet propelled, 33.5 ft. long, range about 55 miles, still under development.

The Detection of Ballistic Missiles

ing of a ballistic missile over a several thousand miles can be deduced from space by special satellites (which *Midas* is a prototype), and ground by long-range radars. The United States has just finished the building of three long-range radar sites, known as BMEWS for Ballistic Missile Early Warning System. It is located in Greenland and consists of four fixed antennas. The second of these stations will be in Clear, Alaska (to be completed in 1961). The third, in York, Alaska, is expected to be completed by the end of 1962. Each one of these stations will have a range of about 3000 miles (see map).

Detection of a ballistic missile, fired from a distance of 6000 miles or better, strongly depends on the trajectory of a missile placed in orbit. But the trajectory of a missile which is to re-enter the atmosphere is somewhat steeper than that of an orbiting missile. The peak of the trajectory, located half-way between

take-off pad and target, is likely to be more than a thousand miles from the surface, farther out than many satellite orbits.

This makes detection somewhat easier because the radar beam does not follow the curvature of the ground. If the radar is located about 700 miles from the launching pad, its beam, even if it is strictly horizontal, will pass some 60 miles over the launching pad and the missile will not be detected until it has reached that altitude. If the distance between radar and launching pad is 1400 miles, the beam will pass 250 miles above the launching site. At a distance of 2000 miles the beam will be nearly 600 miles above the pad, and at a distance of 3000 miles it will be 1100 miles above the launching site. These figures explain why it is necessary to locate the radar as close to the likely launching sites as possible.

Of course the BMEWS stations can only detect an enemy missile; the destruction of the missile would be up to anti-missile missiles, which still have to be developed.

U. S. Ballistic Missiles of Operational and Near-operational Status

Name	Length (ft.)	Take-off Weight (lbs.)	Range (miles)	Fuel	Take-off thrust (lbs.)	Prim- Contractor
GROUND-TO-GROUND:						
Atlas.....	82	265,000	6,000+	Liquid	360,000	Convair
Titan.....	90	222,000	7,000+	Liquid	340,000	Martin
Thor.....	62	110,000	1,500	Liquid	160,000	Douglas
Jupiter.....	59	110,000	1,500	Liquid	160,000	Chrysler
Redstone.....	63	61,000	200	Liquid	110,000	Chrysler
Corporal.....	46	12,000	50	Liquid	20,000	Firestone
Sergeant.....	30	.....	50+	Solid	.....	JPL/Sperry
Honest John ¹	27	6,000	15	Solid	.....	Emerson
Little John.....	15	.....	15?	Solid	.....	Douglas
Lacrosse.....	19	2,300	20	Solid	.....	Martin
Polaris.....	28	28,000	1,100	Solid	.....	Lockheed
SURFACE-TO-AIR:						
Nike Ajax.....	21	.....	25	Solid	.....	Western
Nike Hercules.....	27	.....	75+	Solid	.....	Western
Terrier.....	15	3,000	10	Solid	.....	Convair
AIR-TO-SURFACE:						
Bullpup.....	11	571	3	Solid	.....	Martin
Rascal.....	32	.....	100	Liquid	.....	Bell
ANTI-SUBMARINE:						
Able.....	8.5	500	.....	.....	.....	Avco
AIR-TO-AIR:						
Falcon.....	6.5	100	.....	Solid	.....	Hughes
Genie ²	8	.....	1.5	Solid	.....	Douglas
Sidewinder I-A.....	9	155	2	Solid	.....	Philco
Sparrow I ³	12	300	5+	Solid	.....	Sperry
Sparrow III ³	12	350	.....	Solid	.....	Raytheon

¹ Honest John and Little John are unguided artillery Rockets. ² Genie is an unguided rocket. ³ Sparrow I is replaced by Sparrow III.

NOTE: A rather large number of other missiles are under development at the time the Almanac goes to press. Most of them are either direct improvements of missiles now in existence or new designs which will, when finished, replace other missiles slowly becoming obsolescent. The solid-fuel *Pershing* is meant to replace the liquid-fuel *Redstone* just as the solid-fuel *Sergeant* has replaced the liquid-fuel *Corporal*. The *Skybolt* missile (to be fired from aircraft at ground targets) with its 1,000-mile range, will replace the *Rascal* with its 100-mile range. The three-stage solid-fuel *Minuteman* will, when finished, replace the *Atlas* and *Titan* as the ICBM (but *Atlas* and *Titan* will continue to be used as space boosters) and the upper two stages of the *Minuteman*, fired without its first-stage booster, might replace the *Jupiter* and the *Thor*. The *Nike-Zeus* is likely to become the anti-missile missile. The general trend is the replacement of existing missiles with others which have the same capabilities but are smaller and presumably cheaper.

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If our supply is exhausted when we receive your order, we reserve the right to return your money without furnishing you a copy.

AVIATION



Famous Firsts in Aviation

First balloon flight. Jacques and Joseph Montgolfier of Annonay, Fr., sent a small smoke-filled balloon about November.

First hydrogen-filled balloon flight. A. C. Charles, Paris physicist, used construction by A. J. and M. Bert of a 13-ft. diameter balloon was filled with hydrogen. It got up to 3,000 ft. and traveled about 16 a 45-min. flight (Aug. 27).

First human balloon flights. A man, Jean Pilâtre de Rozier, made a captive-balloon ascension (Oct. 17). With the Marquis d'Arlandes, de Rozier made the first free reaching a peak altitude of about 1,000 ft. and traveling about 5½ mi. in (Nov. 21).

First powered balloon. Gen. Jean Baptiste Meusnier developed the propeller-driven and elliptically-balloon—the crew cranking three gears on a common shaft to give it a speed of about 3 mi. per hr.

First woman to fly. Mme. Thible, a opera singer (June 4).

First balloon flight in America. Jean Blanchard, a French pilot, made Philadelphia to near Woodbury, N. J., in a little over (Jan. 9).

First military use of the balloon. Marie Coutelle, using a balloon for the French Army, made two observation ascents. The military use of the ascents seems to have been due to the enemy's morale.

First parachute jump. André-Jacques Garnerin dropped from about 6,500 ft. in a basket in Paris in a 23-ft. parachute made of white canvas basket attached (Oct. 22).

First air transport company. In London, William S. Henson and John Stringfellow secured articles of incorporation for the Aerial Transit Company (Mar. 24).

First dirigible. Henri Giffard, a engineer, flew in a controllable (or less) steam-engine-powered dirigible 144 ft. long and 39 ft. in diameter, inflated with 88,000 cu. ft. of hydrogen. It reached 6.7 mi. per hr. on a flight from Paris to Trappe (Sept. 24).

First aerial photographers. Samuel King and William Black made the first aerial photographs of Boston, still in existence.

1872—First gas-engine powered dirigible. Paul Hæmle, a German engineer, flew in a semi-rigid-frame dirigible, powered by a 4-cylinder internal-combustion engine running on coal gas drawn from the supporting bag.

1873—First transatlantic attempt. *The New York Daily Graphic* sponsored the attempt with a 400,000 cu. ft. balloon carrying a lifeboat. A rip in the bag during inflation brought collapse of the balloon and the project.

1897—First successful metal dirigible. An all-metal dirigible, designed by David Schwarz, a Hungarian, took off from Berlin's Tempelhof Field and, powered by a 16-hp. Daimler engine, got several miles before leaking gas caused it to crash (Nov. 13).

1900—First Zeppelin flight. Germany's Count Ferdinand von Zeppelin flew the first of his long series of rigid-frame airships. It attained a speed of 18 mi. per hr. and got 3½ mi. before its steering gear failed (July 2).

1903—First successful heavier-than-air machine flight. Aviation was really born on the sand dunes at Kitty Hawk, N.C., when Orville Wright crawled to his prone position between the wings of the biplane he and his brother Wilbur had built, opened the throttle of their home-made 12-hp. engine and took to the air. He covered 120 ft. in 12 sec. Later that day, in one of four flights, Wilbur stayed up 59 sec. and covered 852 ft. (Dec. 17).

1904—First airplane maneuvers. Orville Wright made the first turn with an airplane (Sept. 15); 5 days later his brother Wilbur made the first complete circle.

1905—First airplane flight over half an hour. Orville Wright kept his craft up 33 min. 17 sec. (Oct. 4).

1906—First European airplane flight. Alberto Santos-Dumont, a Brazilian, flew a heavier-than-air machine at Bagatelle Field, Paris (Sept. 13).

1908—First airplane fatality. Lt. Thomas E. Selfridge, U.S. Army Signal Corps, was in a group of officers evaluating the Wright plane at Fort Myer, Va. He was up about 75 ft. with Orville Wright when the propeller hit a bracing wire and was broken, throwing the plane out of control, killing Selfridge and seriously injuring Wright (Sept. 17).

1910—First licensed woman pilot. Baroness Raymonde de la Roche of France, who

- learned to fly in 1909, received ticket No. 36 on March 8.
- 1910—First flight from shipboard. Lt. Eugene Ely, USN, took a Curtiss plane off from the deck of cruiser *Birmingham* at Hampton Roads, Va., and flew to Norfolk (Nov. 14). The following January he reversed the process, flying from Camp Selfridge to the deck of the armored cruiser *Pennsylvania* in San Francisco Bay (Jan. 18).
- 1911—First U.S. woman pilot. Harriet Quimby, a magazine writer, who got ticket No. 37.
- 1913—First multi-engined aircraft. Built and flown by Igor Ivan Sikorsky while still in his native Russia.
- 1914—First aerial combat. In August, Allied and German pilots and observers started shooting at each other with pistols and rifles—with negligible results.
- 1915—First air raids on England. German Zeppelins started dropping bombs on four English communities (Jan. 19).
- 1918—First U.S. air squadron. The U.S. Army Air Corps made its first independent raids over enemy lines, in DH-4 planes (British-designed) powered with 400-hp. American-designed Liberty engines (Apr. 8).
- 1918—First regular airmail service. Operated for the Post Office Department by the Army, the first regular service was inaugurated with one round trip a day (except Sunday) between Washington, D.C., and New York City (May 15).
- 1919—First transatlantic flight. The NC-4, one of four Curtiss flying boats commanded by Lt. Comdr. Albert C. Read, reached Lisbon, Port. (May 27) after hops from Trepassy Bay, Nfld. to Horta, Azores (May 16-17), to Ponta Delgada (May 20). The Liberty-powered craft was piloted by Walter Hinton.
- 1919—First nonstop transatlantic flight. Capt. John Alcock and Lt. Arthur Whitten Brown, British World War I flyers, made the 1,900 mi. from St. John's, Nfld. to Clifden, Ire., in 16 hr. 12 min. in a Vickers-Vimy bomber with two 350-hp. Rolls-Royce engines (June 15-16).
- 1919—First lighter-than-air transatlantic flight. The British dirigible R-34, commanded by Maj. George H. Scott, left Firth of Forth, Scot. (July 2) and touched down at Mineola, L. I., 108 hr. later. The eastbound trip was made in 75 hr. (completed July 13).
- 1919—First scheduled passenger service (using airplanes). Aircraft Travel and Transport inaugurated London-Paris service (Aug. 25). Later the company started the first trans-channel mail service on the same route (Nov. 10).
- 1921—First naval vessel sunk by aircraft. Two battleships being scrapped by treaty were sunk by bombs dropped from American planes in demonstration put on by Gen. William S. Mitchell (July 21).
- 1921—First helium balloon. The C-7, a rigid Navy dirigible was first to use inflammable helium as lifting gas, making a flight from Hampton Roads, to Washington, D.C. (Dec. 1).
- 1922—First member of Caterpillar Club. (later Maj. Gen.) Harold G. Gatty bailed out of a crippled plane while testing at McCook Field, Dayton, Ohio (Oct. 20), and became the first man to join the Caterpillar Club—those whose lives have been saved by parachute.
- 1923—First nonstop transcontinental flight. Lts. John A. Macready and Oakley K. Gribble flew a single-engine Fokker T-2 nonstop from New York to San Diego, a distance of just over 2,500 mi. in 26 hr. 50 min. (May 2-3).
- 1923—First autogyro flights. Juan de la Cierva, brilliant Spanish mathematician made the first successful flight in his rotary wing aircraft in Madrid (June 10).
- 1924—First round-the-world flight. Four Douglas Cruiser biplanes of the Army Air Corps took off from Seattle under command of Maj. Frederick M. Lincoln (Apr. 8). 175 days later two of the planes (Lt. Lowell Smith's and Lt. Harold G. Gribble's) landed in Seattle after a circuitous route—one source saying 27,000 mi., another saying 27,553 mi.
- 1926—First polar flight. Then-Lt. Col. Richard E. Byrd, acting as navigator, Floyd Bennett as pilot, flew a trimotor Fokker from Kings Bay, Spitzbergen, over the North Pole and back in 15½ days (May 8-9).
- 1927—First solo transatlantic flight. Charles Augustus Lindbergh lifted his Wright-powered Ryan monoplane, *Spirit of St. Louis*, from Roosevelt Field, L. I. to stay aloft 33 hr. 39 min. and cover 3,600 mi. to Le Bourget Field outside Paris (May 20-21).
- 1927—First transatlantic passenger. Charles A. Levine was piloted by Clarence Chamberlin from Roosevelt Field, L. I. to Eisleben, Ger., in a Wright-powered Bellanca (June 4-5).
- 1928—First east-west transatlantic crossing. Baron Guenther von Huenfeldt piloted by German Capt. Hermann Koenig and Irish Capt. James Fitzmaurice, Dublin for New York City (Apr. 12) in a single-engine all-metal Junkers monoplane. Some 37 hr. later they cracked on Greely Island, Labrador. Rescued.
- 1928—First U.S.-Australia flight. Charles Kingsford-Smith and Charles T. P. Ulm, Australians, and American navigators, Harry W. Lyon and James Warner, crossed the Pacific from Oakland to Brisbane. They went

and the Fiji Islands in a tri-
Fokker (May 31-June 8).

First trans-Arctic flight. Sir Hubert
is, Australian explorer, piloted by
Ben Eielson, flew from Point Bar-
alaska, to Spitsbergen (mid-April).
First of the endurance records. With
rps Maj. Carl Spaatz in command
apt. Ira Eaker as chief pilot, an
Fokker, aided by refueling in the
remained aloft 150 hr. 40 min. at
angeles (Jan. 1-7).

First blind flight. James H. Doo-
proved the feasibility of instrument
when he took off and landed en-
on instruments (Sept. 24).

First rocket engine flight. Fritz von
German auto maker, stayed aloft
small rocket-powered craft for
covering nearly 2 mi. (Sept. 30).

First South Pole flight. Comdr.
d E. Byrd, with Bernt Balchen as
Harold I. June, radio operator, and
A. C. McKinley, photographer, flew
motor Fokker from the Bay of
Little America, over the South
and back (Nov. 28-29).

First Paris-New York nonstop flight.
nné Coste and Maurice Bellonte,
pilots, flew a Hispano-powered
t biplane from Le Bourget Field
ey Stream, L. I., in 37 hr. 18 min.
(2-3).

First flight into the stratosphere.
Auguste Piccard, Swiss physicist,
Charles Knipfer, ascended in a bal-
om Augsburg, Ger., and reached a
of 51,793 ft. in a 17-hr. flight that
ated on a glacier near Innsbruck,
(May 27).

First nonstop transpacific flight.
Merndon and Clyde Pangborn took
a Sabishiro Beach, Japan, dropped
anding gear and flew 4,860 mi. to
enatchee, Wash., in 41 hr. 13 min.
(4-5).

First woman's transatlantic solo.
Earhart, flying a Pratt & Whit-
sp-powered Lockheed Vega, flew
om Harbor Grace, Nfld., to Ireland
oximately 15 hr. (May 20-21).

First westbound transatlantic solo.
A. Mollison, British pilot, took a
lland Puss Moth from Portmar-
e., to Pennfield, N. B. (Aug. 18).

First woman airline pilot. Ruth
d Nichols, first woman to hold
international records at the same
speed, distance, altitude—was em-
by N.Y.-New England Airways.

First round-the-world solo. Wiley
k a Lockheed Vega, *Winnie Mae*,
ni. around the world in 7 days
9½ min. (July 15-22).

First successful helicopter. Hanna
German woman pilot, flew Dr.
a Focke's FW-61 in free, fully-
ed flight at Bremen (July 4).

1939—First turbojet flight. Just before
their invasion of Poland, the Germans
flew a Heinkel He-178 plane powered by
a Heinkel S3B turbojet (Aug. 27).

1942—First American jet plane flight. Rob-
ert Stanley, chief pilot for Bell Aircraft
Corp., flew the Bell XP-59 *Airacomet* at
Muroc Army Base, Calif. (Oct. 1).

1947—First piloted supersonic flight in an
airplane. Capt. Charles E. Yeager, U.S.
Air Force, flew the X-1, rocket-powered
research plane built by Bell Aircraft
Corp., faster than the speed of sound at
Muroc Air Force Base, Calif. (Oct. 14).

1949—First round-the-world nonstop flight.
Capt. James Gallagher and USAF crew
of 13 flew a Boeing B-50A Superfortress
around the world nonstop from Ft.
Worth, Tex., returning to same point;
23,452 mi. in 94 hr. 1 min., with 4 aerial
refuelings enroute (Feb. 27-Mar. 2).

1950—First nonstop transatlantic jet flight.
Col. David C. Schilling (USAF) flew
3,300 mi. from England to Limestone,
Maine, in 10 hr. 1 min. (Sept. 22).

1950—First jet-plane battle. Four U.N.
jets attacked by 8 to 12 Communist jets
near Sinuiju, Korea. One enemy jet re-
ported shot down; no U.N. losses (Nov. 8).

1951—First solo across North Pole.
Charles F. Blair, Jr., flew a converted
P-51 (May 29).

1952—First jetliner service. De Havilland
Comet flight inaugurated by BOAC be-
tween London and Rome (Apr. 21).
Round trip: 4 hr. 46 min. flying time.

1952—First transatlantic helicopter flight.
Capt. Vincent H. McGovern and 1st Lt.
Harold W. Moore piloted 2 Sikorsky
H-19s from Westover, Mass., to Prest-
wick, Scot. (3,410 mi.). Trip was made
in 5 steps, with flying time of 42 hr.
25 min. (July 15-31).

1952—First transatlantic round trip in
same day. British Canberra twin-jet
bomber flew from Aldergrove, N. Ire.,
to Gander, Nfld., and back in 7 hr. 59
min. flying time (Aug. 26).

1955—First transcontinental round trip in
same day. Lt. John M. Conroy piloted
F-86 Sabrejet across U.S. (Los Angeles-
New York) and back—5,085 mi.—in 11
hr. 33 min. 27 sec. (May 21).

1957—First round-the-world, nonstop jet
plane flight. Maj. Gen. Archie J. Old, Jr.,
USAF, led a flight of 3 Boeing B-52
bombers, powered with 8 10,000-lb.-
thrust Pratt & Whitney Aircraft J57
engines around the world in 45 hrs.,
19 min.; distance 24,325 mi.; average
speed 525 m.p.h. (Completed Jan. 18.)

1958—First transatlantic jet passenger
service. BOAC, New York to London (Oct.
4). Pan American started daily service,
N.Y. to Paris (Oct. 26).

1958—First domestic jet passenger service.
National Airlines inaugurated service
between New York and Miami (Dec. 10).

World "Class" Airplane Records

Source: National Aeronautic Association.

(Speed over measured straightaway course)

Speed (mph)	Date	Type plane	Pilot	Place
294.38	Sept. 5, '32	Gee Bee Racer	Maj. J. H. Doolittle (U.S.A.)	Cleveland
304.98	Sept. 4, '33	Wedell-Williams	James R. Wedell (U.S.A.)	Glenview, Ill.
314.32	Dec. 25, '34	Caudron	Raymond Delmotte (France)	Istres
352.39	Sept. 13, '35	Hughes Special	Howard Hughes (U.S.A.)	Santa Anna
379.63	Nov. 11, '37	BF-113R	Herman Wurster (Germany)	Augsburg
469.22	Apr. 26, '39	ME-109R	Fritz Wendel (Germany)	Augsburg
606.25	Nov. 7, '45	Gloster Meteor IV	Gp. Capt. H. Wilson (Gr. Britain)	Herne Bay
615.78	Sept. 7, '46	Gloster Meteor	Gp. Capt. E. M. Donalson (Gr. Britain)	Little Hampton
650.80	Aug. 25, '47	Douglas D-558	Maj. Marion Carl, USMC (U.S.A.)	Muroc AFB, Ca.
670.98	Sept. 15, '48	North American F-86A	Maj. R. L. Johnson (USAF)	Muroc AFB, Ca.
698.51	Nov. 19, '52	North American F-86D	Capt. James S. Nash (USAF)	Salton Sea, Cal.
755.15	Oct. 29, '53	North American YF	Lt. Col. F. K. Everest, Jr. (USAF)	Salton Sea, Cal.
822.27	Aug. 20, '55	North American F-100C	Col. Horace A. Hanes (U.S.A.)	Palmdale, Calif.
1,132.14	Mar. 10, '56	Fairey Delta 2	L. Peter Twiss, D.S.C. (Gr. Britain)	Ford-Chichester
1,207.63	Dec. 12, '57	McDonnell F-101A	Maj. Adrian E. Drew (USAF)	Edwards, Calif.
1,404.09	May 16, '58	Lockheed F104	Capt. Walter W. Irwin	Edwards, Calif.
1,525.96	Dec. 15, '59	F-106A Delta Wing Monoplane	Maj. Joseph W. Rogers (USAF)	Edwards, Calif.

(Fastest U.S. transcontinental: Lt. Gustav B. Klatt (USAF)—McDonnell RF-101C Voodoo—from Ontario, Ont., Calif., to Floyd Bennett Field, Brooklyn, N. Y.—2,445.9 mi. in 3 hr., 7 min., 43.64 sec.; average speed 777 mph—Nov. 27, 1957.)

Distance (Straight Line)

Distance (mi.)	Date	Crew	From	To
4,466.57	July 3-5, '28	Majs. A. Ferrarin, Del Prete (Italy)	Rome	Touros
4,911.93	Sept. 27-29, '29	Costes & Bellonte (France)	Le Bourget	Moulant
5,011.35	July 28-30, '31	Russel N. Boardman, John Polando (U.S.A.)	New York	Istanbul
5,656.93	Aug. 5-7, '33	Maurice Rossi, Paul Codos (France)	New York	Ryack
6,305.66	July 12-14, '37	Col. M. Gromov, Youmachev, Daniline (U.S.S.R.)	Moscow	San Jacinto, C.
7,158.44	Nov. 5-7, '38	Sqd. Ldr. R. Kellett (Gr. Britain)	Ismalia (Suez)	Darwin
7,916.00	Nov. 19-20, '45	Col. C. S. Irvine & Lt. Col. G. R. Stanley, (U.S.A.)	Guam	Washington, D.C.
11,235.60	Sept. 29-Oct. 1, '46	Comdr. Thomas D. Davies, Comdrs. Eugene P. Rankin, Walter S. Reid, Lt. Comdr. Ray A. Tabeling (U.S.A.)	Perth, Australia	Columbus, Ohio

(Longest light airplane distance: Maximilian A. Conrad—U. S. Piper Comanche 250, Lycoming O-540-A1A5 hp.), from Casablanca, Morocco, to Los Angeles, Calif., 7,668.48 mi.—June 2-4, 1959.

Distance (Closed Course)

Distance (mi.)	Date	Crew	Place
4,988.969	Dec. 15-17 '29	Costos & Codos (France)	Istres
5,088.267	May 31—June 2, '30	Maj. U. Maddalena & Lt. F. Cecconi (Italy)	Montecello
6,444.881	June 7-10, '31	J. LeBrix & M. Doret (France)	Istres
6,587.441	Mar. 23-26, '32	Bossoutrot & Rossi (France)	Oran
7,239.588	May 13-15, '38	Comm. Fujita & Sgt. Maj. Takahashi (Japan)	Kisarazu
8,037.899	July 30—Aug. 1 '39	Angelo Tondi, Roberto Dagasso, Ferruccio Vignoli (Italy)	Rome
8,854.308	Aug. 1-2, '47	Lt. Col. O. F. Lassiter (U.S.A.) Capt. W. J. Valentine (U.S.A.)	Tampa, Fla.

Altitude

Height (feet)	Date	Crew	Place
43,166	June 4, '30	Lt. Apollo Soucek (U.S.A.)	Washington
43,976	Sept. 16, '32	Capt. Cyril F. Uwins (Gr. Britain)	Filton, Bristol
44,819	Sept. 28, '33	G. Lemoine (France)	Villacoublay
47,352	April 11, '34	Com. Renato Donati (Italy)	Rome
49,944	Sept. 28, '36	Sqd. Ldr. F. R. D. Swain (Gr. Britain)	South Farnborough
53,937	June 30, '37	Fl. Lt. M. J. Adam (Britain)	Farnborough
56,046	Oct. 22, '38	Col. Mario Pezzi (Italy)	Montecello
59,445*	Mar. 23, '48	John Cunningham (Gr. Britain)	Hatfield
63,668*	May 4, '53	Walter F. Gibb (Gr. Britain)	Bristol
65,889*	Aug. 29, '55	Walter F. Gibb (Gr. Britain)	Bristol
70,308*	Aug. 28, '57	Michael Randrup (Gr. Britain)	Luton, Eng.
91,243*	May 7, '58	Maj. H. C. Johnson (USAF)	Palmdale, Calif.
103,389	Nov. 14, '59	Capt. Joe B. Jordan (USAF)	Edwards, Calif.

* Jet-propelled aircraft.

(Absolute altitude: 101,516 ft.—Maj. David G. Simons (USAF)—AF-WRI-1 balloon—take-off near Crosby, N. Y., landing near Frederick, S. D.—Aug. 19-20, 1957.

Helicopter Records

Source: National Aeronautic Association.

CE, AIRLINE

National: 1,217.14 mi.

J. Smith (U. S.) in Bell 47-D1 helicopter powered by 200-hp. Franklin; from Worth, Tex., to Niagara Falls, N. Y., 17, 1952.

CE, CLOSED CIRCUIT

National: 1,199.078 mi.

Harry L. Bush and Maj. William C. (USA) in Vertol H21-C helicopter powered by 1275-hp. Wright 10-103; Robbinsville, N. J., Aug. 11, 1952.

DE

National: 36,037 ft.

Boulet (France) in S.E. 3150/022 "ette" F-ZWVB helicopter powered by Turbomeca Artouste III 500-hp engine; Bretigny sur Orge, June 13, 1958.

DM SPEED

National: 162.743 mph.

Toy L. Anderson (USMC), pilot, Lt S. Decker, co-pilot (U. S.), in Sikorsky HO4S-1 helicopter powered by 2 & Whitney R-2800-54 engines; Fort Locks, Conn., Nov. 11, 1956.

FOR 100 K.M. (CLOSED CIRCUIT)

National: 167.09 mph.

Smekov & Nikolai Liechine (USSR) in I-6 helicopter powered by 4700-hp. BM; Golitsyno, USSR, Nov. 21, 1959.

FOR 500 K.M. (CLOSED CIRCUIT)

National: 136.014 mph.

Claude E. Hargett & Ellis D. Hill in Sikorsky H-34 helicopter powered by 1275-hp. Wright R-1820; Mil-Conn., July 12, 1956.

FOR 1,000 K.M. (CLOSED CIRCUIT)

National: 132.633 mph.

Claude E. Hargett & Ellis D. Hill in Sikorsky H-34 helicopter powered by 1275-hp. Wright R-1820; Mil-Conn., July 12, 1956.

Estimated U. S. Airplane Pilots

Source: Federal Aviation Agency.

Total	Airline transport	Com- mercial	Private
166,626	2,177	55,760	108,689
173,206	2,315	63,940	106,950
183,383	3,046	68,449	111,888
296,895	5,815	162,873	128,207
400,061	7,654	203,251	189,156
433,241 ¹	7,059 ¹	181,912 ¹	244,270 ¹
491,306 ²	7,762 ²	176,845 ²	306,699 ²
525,174	9,025	187,769	328,380
580,574	10,813	197,000	371,861
581,218	11,357	193,575	376,286
585,974	12,757	195,363	377,854
613,695	13,341	201,441	398,913
643,201	13,700	211,142	418,359
669,079	15,295	221,096	432,688
702,519	16,900	237,149	448,470
731,078	18,303	245,541	467,234
758,339	19,364	255,377	483,598

11/1, 1948. ² As of May 1, 1949. NOTE: Available for 1950.

U. S. Scheduled Airlines, 1958

Source: Civil Aeronautics Board.

Airline	Certificated route mileage ¹	Revenue passenger- miles, 1959
Domestic (Trunk)		
American ²	26,663	5,614,425,000
Braniff	10,153	934,554,000
Capital	9,885	1,611,177,000
Continental 29	7,202	672,495,000 ³
Delta	16,836	1,556,137,000
Eastern ⁴	25,020	4,431,554,000
National	3,607	1,100,933,000
Northeast	6,940	519,049,000
Northwest	11,085	1,384,253,000
Trans World (TWA)	22,110	4,579,229,000
United	18,153	4,827,345,000
Western	7,607	896,065,000
TOTAL	165,261	28,127,216,000
Domestic (Local Service)		
Allegheny	2,746	98,351,000
Bonanza	2,622	54,420,000
Central	4,359	31,580,000
Continental 64	2,187	(⁵)
Frontier	9,004	76,445,000
Helicopter (Chicago)	294	3,667,000
Helicopter (Los Angeles)	389	1,476,000
Helicopter (New York)	222	2,334,000
Lake Central	2,374	35,604,000
Mohawk	2,269	107,421,000
North Central	7,177	153,085,000
Ozark	5,875	92,106,000
Piedmont	3,766	99,360,000
Southern	3,525	44,956,000
Pacific	2,187	93,636,000
Trans-Texas	5,552	65,086,000
West Coast	3,478	71,427,000
TOTAL	58,026⁶	1,030,954,000
Foreign or Overseas		
Alaska Airlines	1,665 ⁶	32,297,000 ⁶
Aerovias Sud Americana ⁷	9,860	
American ²	3,375	117,665,000
Braniff	8,361	91,131,000
Caribbean Atl.	566	22,849,000
Delta	3,630	60,023,000
Eastern ⁴	9,586	593,264,000
Hawaiian	389	69,609,000
Mackey	1,869	23,429,000
National	114	53,436,000
Northwest	16,349	353,887,000
Pacific Northern ⁵	3,057	113,075,000 ⁶
Pan American	190,138	4,231,618,000
Panagra	10,643	186,226,000
Resort	13,645	512,000
Riddle ⁷	2,309	
Seaboard & Western ⁷	15,163	
South Pacific ⁸	2,776	
Trans-Caribbean ⁹	1,605	146,476,000
Trans Pacific ¹⁰	379	41,254,000
Trans World (TWA)	38,664	672,784,000
United	2,898	281,967,000
UMCA ¹¹	378	341,000
Western	1,640	82,910,000
TOTAL	339,059	7,174,753,000

¹ As of Dec. 31, 1959. ² On strike 12/20/58-1/11/59.
³ Continental #29 and #64 combined. ⁴ On strike 11/24/58-1/2/59. ⁵ Alaska-Washington state mileage.
⁶ Includes Intra-Alaska operations not separately reporting. ⁷ All-cargo carrier. ⁸ Service not yet inaugurated.
⁹ Name changed to Transportation Corporation 10/29/59.
¹⁰ Name changed to Aloha Airlines 2/11/59. ¹¹ Certificate cancelled 6/20/60.

U. S. Airlines Transport Planes

Source: Aircraft Industries Assn. and National Aviation Education Council.

Manufacturer	Type	Passengers	Maximum speed, mph	Maximum weight	Wingspan	Over- length
TURBOJETS*						
4-engine						
Douglas.....	DC-8	116-176	610 ¹	276,000	142' 4"	150'
Boeing.....	707	108-189	600	248,000	134' 6"	130'
	720	88-149	615	213,000	130' 10"	136'
Convair.....	880	88-110	615	184,500	120' 0"	129'
2-engine						
Sud Aviation.....	Caravelle ²	80	510	99,210	112' 6"	104'
PROPJETS*						
4-engine						
Lockheed.....	Electra	66-98	400 ³	116,000	99' 0"	104'
Vickers.....	Viscount	40-63	340	64,500	93' 8"	81'
2-engine						
Fairchild.....	F-27	40	300	37,500	95' 2"	77'
PISTON						
4-engine						
Douglas.....	DC-7	69-99	410	122,000	117' 6"	106'
	DC-6	54	370	100,000	117' 6"	106'
	DC-4	44-60	240	73,000	117' 6"	93'
Lockheed.....	Super-Constellation					
	(1049)	94	346	140,000	123' 0"	113'
	1649 ⁴	47-99	377	156,000	150' 0"	116'
Boeing.....	377					
	(Stratocruiser)	50-80	375	148,000	141' 2"	110'
2-engine						
Convair.....	440	44-52	280	49,100	105' 4"	79'
Martin.....	404	40	300	44,900	93' 3"	72'
Douglas.....	DC-3	21	230	25,200	95' 0"	64'

* NOTE: A turbojet (often called "pure jet") is a gas turbine producing an exhaust rather similar to a rocket exhaust which propels the aircraft. A propjet is also a gas turbine, but the turbine is used to spin a propeller. In a prop about 60 per cent of the propulsive force is due to the propeller, the other 40 per cent is due to the jet.

¹ The different series of the jetliners usually have different engines, hence the maximum speed is not quite the same for the different series. ² To be introduced in 1961. ³ Maximum speed currently restricted to 250 mph per regulations designed to eliminate the possibility of accidents. ⁴ The Lockheed 1649 is variously called "Super Starliner" and "Jetstream" (by TWA).

Principal operators of the airliners listed above: DC-8 UAL, Delta; 707 AAL, PAA, TWA; DC-7 AAL, EAL, NW, PAA, UAL; DC-6 AAL, BNF, Delta, EAL, NW, PAA, UAL; Viscount CAP, NE, CON; Boeing 377 NW Constellation etc. CAP, EAL, TWA; DC-4 CAP, NW, PAA; Convair EAL, BNF, UAL; Martin 404 EAL, Fairchild Piedmont, West Coast; DC-3 Allegheny, Bonanza, BNF, CAP, CON, Delta, Frontier, Lake Central, Central, Mohawk, NE, Ozark, Trans-Texas and others.

U. S. Warplane Production Record, 1940-45

Source: Civil Aeronautics Administration.

Type	1940	1941	1942	1943	1944	1945	1946
Total.....	6,019	19,433	47,836	85,898	96,318	47,714	303
Bombers.....	1,191	4,115	12,627	29,355	35,003	16,492	98
Fighters.....	1,685	4,416	10,769	23,988	38,873	21,696	101
Photographic and reconnaissance.....	121	727	1,468	734	259	531	3
Transport.....	290	532	1,984	7,012	9,834	4,629	24
Trainer.....	2,731	9,373	17,631	19,939	7,577	1,309	58
Other*.....	1	270	3,357	4,870	4,772	3,057	16

* Includes special-purpose, rotary-wing, and liaison aircraft.

Important American Aircraft Types (U.S. Air Force)

Source: U.S. Department of Defense.

Manufacturer	Power plant ¹	Max. take-off ratings	Span, feet	Length, feet	Height, feet	Weight	Speed, mph	Crew
OMBERS								
Douglas	2 R2800 PW-79	2,000 hp.	70.0	51.3	18.5	40,000	Over 300 ^a	3
Boeing	4 R3350 W-57 or 57A	2,200 hp.	141.2	99.0	27.8	140,000	345 ^a	11
Convair	6 R4360 PW-53	3,800 hp.	230.0	162.0	46.8	370,000	Over 435	15
	4 J47 GE-19	52,000 lb.						
North American	4 J-47 GE-9 or 15	5,200 lb.	89.0	75.3	25.2	110,000	500 knot class	4
Boeing	6 J47 GE-25	6,000 lb.	116.0	107.1	28.0	200,000	600 class	3
Boeing	4 R4360 PW-35	3,500 hp.	141.2	99.0	32.7	170,000	Over 400	10
Boeing	8 J57 P	10,000 lb.	185.0	156.5	48.3	Over 400,000	Over 650	6
Martin	J-65 W	Over 7,200 lb.	64.0	65.5	14.8	50,000	Over 500	2
Convair	4 J-79	Over 10,000 lb. ⁴	56.8	96.8	31.4	160,000	Over 1,300	3
Douglas	2 J71 A-13	10,000 lb.	72.5	75.1	23.6	83,000	600-700	3-5
IGHTERS								
Lockheed	1 J33 A-31 or 35	5,200 lb.	38.9	34.5	11.3	16,000	600 class	1
Republic	1 J65 W-3	7,200 lb.	33.6	47.4	15.0	25,000	Over 650	1
Republic	J65 W-3	7,200 lb.	33.6	43.4	15.0	25,000	Over 650	1
Republic	1 J35 A-29	5,600 lb.	36.4	38.1	12.6	18,000	600 class	1
North American	1 J47 GE-33	7,650 lb. ^a	37.1	40.3	15.0	18,000	650 class	1
North American	1 J47 GE-27	5,970 lb.	37.1	37.5	14.7	17,000	650 class	1
North American	1 J73 GE-3	.....	37.1	38.8	15.0	.....	Over 650	1
Northrop	2 J35 A-33	5,400 lb.	56.1	53.4	17.6	40,000	600 class	2
Lockheed	J33 A-33	4,600 lb.	37.5	40.1	12.7	16,000	600 class	2
Lockheed	1 J48 P 5	6,250 lb.	37.3	44.5	14.9	20,000	600 class	2
North American	J57 P-7	15,000 lb.	38.6	47.8	15.3	28,000	Over 1,000	1
McDonnell	2 J57 P-13	15,000 lb.	39.7	67.4	18.0	Over 40,000	Over 1,000	1
Convair	1 J57 P-23	15,000 lb.	38.0	68.0	21.0	Over 25,000	Supersonic	1
Lockheed	J79	15,000 lb.	21.0	54.0	13.0	20,000	Over 1,400	1
Republic	J-75-5	15,000 lb.	35.0	63.0	19.8	.....	Supersonic	1
Convair	J75-9 P	15,000 lb.	38.0	70.9	20.4	.....	Over 1,000	1
North American	J75	15,000 lb.	36.0	61.0	19.0	38,000	Over 1,000	1
NSPORTS								
Beech	2 R985-AN-14B P	450 hp.	47.6	34.2	10.7	9,000	190 top ^a	2
Curtiss Wright	P&W R2800-75	2,000 hp.	108.0	76.3	21.7	55,000	230 ^a	4
Douglas	2 R1830-90D P	1,200 hp.	95.0	64.4	16.9	33,000	200 top ^a	5
Douglas	4 R2000-9 P	1,450 hp.	117.5	93.8	27.5	82,500	300 top	3
Douglas	4 R4360-49 P	3,500 hp.	173.3	124.2	43.8	165,000	Over 300	5
Fairchild	2 P&W R2800-85	2,100 hp.	106.5	77.1	26.3	54,000	250 top	5
Boeing	4 R4360-35 A P	3,250 hp.	141.2	110.3	38.3	175,000	Over 350	5
Douglas	4 R2800-CB-17 P	2,200 hp.	117.5	106.8	28.8	107,000	Over 360	5
Fairchild	2 R3350-85 W	3,250 hp.	109.3	86.5	26.2	74,000	250	5
Lockheed	4 R3350	3,250 hp.	123.0	116.0	23.0	125,000	370	5
Chase	2 R1820-101	1,425 hp.	86.4	56.7	21.3	30,000	220 top	2
Fairchild	2 R2800-99W P	2,500 hp.	119.0	75.7	34.1	50,000	240 top	2
Douglas	4 R4360-63 P	3,800 hp.	174.1	130.0	48.3	185,000	Over 300	5
Lockheed	4 T56 A-1	3,750 hp.	132.7	94.8	38.3	108,000	Over 350	4
Convair	R2800-99W	2,500 hp.	91.7	74.7	27.3	43,000	Over 300	2
Boeing	4 J-57-43W	10,000 lb.	130.8	136.3	36.4	250,000	Over 550	4
OPTERS								
Sikorsky	1 R985-AN5 P	450 hp.	49.0	41.1	13.0	6,500	105 top	2
Bell	1 O-335-SA	200 hp.	35.1	31.0	9.5	2,500	100	1
Sikorsky	1 R1340-57 P	600 hp.	53.0	42.1	15.5	7,500	Over 100	..
Vertol	1 R1820-103W	1,425 hp.	44.0	52.5	14.5	15,000	Over 110 ^a	2
Hiller	1 Franklin 6V4-200-C-33	200 hp.	35.0	38.7	9.8	2,500	84	1
Vertol	1 Continental R975-42	550 hp.	35.0	31.9	12.5	6,000	Over 100	2
Sikorsky	R1820-84	1,425 hp.	56.0	49.1	15.8	13,300	132	2
Sikorsky	2 PW R2800-54	1,900 bhp. ⁵	72.0	88.3	22.3	.....	.....	3

n; GE—General Electric; P—Pratt & Whitney; W—Wright. ^a With afterburner. ^s Knots. ⁴ Plus

⁵ At 2,600 rpm.

EDUCATION

Elementary and Secondary Public School Statistics, 1958-59

Source: Information Please Almanac Questionnaire.

NOTE: The average yearly expenditure is based on average daily attendance.

State	Elementary Kindergarten-Grade 8			Secondary Grades 9-12			Average yearly expenditure per pupil	All teachers	
	No. schools	No. pupils	No. teachers	No. schools	No. pupils	No. teachers		Minimum salary	Maximum salary
Alabama.....	376	650,055	20,376	570	125,926 ¹	5,508	\$170.13	\$3,261.00 ¹²	\$3,400.00
Alaska*	135	32,465	1,259	30	6,813	441	450.00	4,500.00	7,500.00
Arizona.....	496	220,318	7,721	89	62,148	2,591	389.03	.....	.....
Arkansas.....	1,149 ⁴	252,504 ⁴	8,005 ⁴	582 ⁵	169,679 ⁵	6,472 ⁵	218.00	2,700.00	.....
California*	4,647	2,445,207	70,258	876	745,538	41,130	386.82	4,200.00	10,000.00
Colorado.....	1,194	270,415	8,479	383	75,488	6,279	362.21	3,380.00 ³	8,000.00
Connecticut.....	774	338,851	10,662	280	102,940	6,578	457.30	3,300.00	9,300.00
Delaware.....	147 ⁶	43,897 ⁶	1,750 ⁶	74 ⁵	29,654 ⁵	1,463 ⁵	445.00	3,600.00	6,700.00
D. C.....	129 ⁶	75,382 ⁶	2,358 ⁶	39 ⁵	37,648 ⁵	1,786 ⁵	412.91	4,500.00	7,300.00
Florida.....	1,303 ⁶	591,306 ⁶	18,582 ⁶	504 ⁵	371,604 ⁵	14,035 ⁵	294.16	3,200.00	7,200.00
Georgia.....	1,742	708,160 ⁷	20,657	623	273,063 ⁸	10,903	214.45	3,000.00 ¹	4,000.00
Hawaii.....	174	83,295	3,296	53	51,290	2,108	275.43	3,040.00	5,400.00
Idaho.....	450	98,052	3,063	200	35,860	2,459	308.77	2,300.00	6,300.00
Illinois†.....	1,202 ¹¹	1,294,713	43,967	273 ¹¹	411,154	19,022	388.75	3,600.00 ¹	5,300.00
Indiana.....	1,500 ¹⁰	730,260	22,970	809 ¹⁰	233,426	10,917	315.70	1,900.00	10,200.00
Iowa.....	2,843	445,526	17,725	819	140,550	9,192	335.40	.....	.....
Kansas.....	2,161 ¹¹	358,557	13,892	567 ¹¹	112,158	6,276	361.06	3,153.00 ¹²	5,550.00
Kentucky.....	3,084	495,146	16,179	458	136,134	6,137	204.00	2,610.00	.....
Louisiana.....	831 ¹⁴	518,745	14,938	170 ¹⁴	147,320	8,864	343.58	.....	.....
Maine†.....	1,050	142,427	5,309	183	41,811	2,273	258.10	2,200.00	4,110.00
Maryland.....	807 ^{15,6}	341,198 ⁶	12,089 ⁶	256 ^{15,5}	214,475 ⁵	9,828 ⁵	360.69	3,200.00	8,900.00
Massachusetts.....	1,770 ¹⁶	535,608	21,036	331 ¹⁶	275,745	13,798	411.81	4,000.00	8,300.00
Michigan.....	4,356	1,145,274 [†]	30,978	832	350,455 [†]	20,802	375.00	3,100.00	8,150.00
Minnesota.....	2,803	396,789 ¹⁷	15,108	673	253,641 ¹⁷	13,532	384.00	2,700.00	6,650.00
Mississippi.....	1,661	443,410	10,201	628	111,853	6,236	177.54	800.00	5,800.00
Missouri.....	1,699 ¹⁸	610,366	20,391	541 ¹⁸	194,850	8,589	487.81	4,110.00 ¹²	4,580.00
Montana.....	1,230 ¹⁹	104,783	4,875	176	31,564	1,764	394.00	2,790.00	5,480.00
Nebraska*	2,856 ²⁰	190,568	9,049	429	85,234	4,884	.....	2,600.00	6,600.00
Nevada.....	167	49,073	1,724	45	20,019	522	379.55	3,700.00	7,500.00
New Hampshire.....	414	77,544	2,716	77	24,492	1,125	321.36	2,600.00	8,100.00
New Jersey*	1,661	756,729	25,849	326	245,317	13,633	394.32	3,800.00	6,200.00
New Mexico.....	588	171,632	6,008	108	49,887	1,960	402.87	3,800.00	7,720.00
New York.....	3,749	2,065,626	83,968	816	686,955	34,153	612.00	4,000.00	11,500.00
North Carolina.....	2,011	830,401	26,162	890	257,712	9,953	215.32	2,946.00	4,550.00
North Dakota.....	2,037 ²¹	99,139	4,835	53	34,629	2,087	327.48	2,624.08 ¹²	4,100.00
Ohio.....	3,024	1,227,362	40,225	1,133	581,561	25,295	332.25	3,500.00	5,100.00
Oklahoma.....	1,930	387,796	11,251	633	137,605	8,188	287.32	3,400.00	5,330.00
Oregon.....	1,087	276,128	10,497	223	97,179	4,339	404.96	3,400.00	6,000.00
Pennsylvania.....	4,179	1,174,436	38,686	1,207	740,615	30,150	385.69	3,400.00	7,400.00
Rhode Island.....	280	82,766	3,112	70	47,744	2,432	385.00	3,400.00	7,400.00
South Carolina.....	990	405,720	12,166	404	194,789	7,762	200.00	900.00	4,500.00
South Dakota.....	2,832	112,372	5,711	258	36,412	2,354	390.54	1,800.00	7,100.00
Tennessee.....	2,647	617,157	21,281	447	182,163	6,859	197.00	1,930.00	3,990.00
Texas†.....	3,787	1,479,225	42,951	1,443	416,842	27,022	291.81	3,204.00	4,070.00
Utah.....	394	139,399	4,169	147	85,821	3,258	286.17	3,400.00	6,050.00
Vermont.....	507	54,679	2,020	84	20,538	914	299.40	2,500.00	6,900.00
Virginia.....	1,969	587,575	18,046	489	234,675	11,083	242.67	2,250.00*	3,850.00
Washington.....	1,173	393,075	13,820	415	202,775	8,426	366.20	.....	6,000.00
West Virginia.....	2,631	298,967	10,432	370	168,013	6,745	222.95	1,935.00	9,000.00
Wisconsin†.....	4,539	471,817	17,883	469	182,035	8,408	339.33	2,000.00	9,000.00
Wyoming.....	484	57,500	2,270	80	18,500	1,180	435.00	3,000.00	8,000.00

* 1959-60. † 1957-58. ¹ Grades 10 through 12. ² No maximum salary established. ³ Teachers without degrees receive a minimum salary of \$2,925. ⁴ Grades 1 through 6. ⁵ Grades 7 through 12. ⁶ Kindergarten through Grade 6. ⁷ Kindergarten through Grade 7. ⁸ Grades 8 through 12. ⁹ School districts; in addition there are unit districts. ¹⁰ Estimates for 1958. ¹¹ School districts. ¹² Average annual salary for elementary teachers. ¹³ Average annual salary for secondary teachers. ¹⁴ There are also 383 combined schools (Grades 1 through 12). ¹⁵ Includes 77 combined schools (Grades 1 through 12). ¹⁶ There are also 118 consolidated units. ¹⁷ Includes 7th and 8th pupils in junior and junior-and-secondary schools. ¹⁸ Operating school districts. ¹⁹ Junior high data included elementary school statistics. ²⁰ There are also 406 combined schools (Grades 1 through 12). ²¹ Includes 1,404 room schools. ²² Local districts may exceed state salary maximum.

State Compulsory School Attendance Laws

Source: U. S. Office of Education.

State	Enactment ¹	Age limits	State	Enactment ¹	Age limits
.....	1915	7-16	Montana	1883	7-16
.....	1929	7-16	Nebraska	1887	7-16
.....	1899	8-16	Nevada	1873	7-17
.....	1909	7-16	New Hampshire	1871	6-16
a	1874	8-16	New Jersey	1875	7-16
cut	1889	8-16	New Mexico	1891	6-17
.....	1872	7-16	New York	1874	7-16
.....	1907	7-16	North Carolina	1907	7-16
.....	1864	7-16	North Dakota	1883	7-16
.....	1915	7-16	Ohio	1877	6-18
.....	1916	7-16	Oklahoma	1907	7-18
.....	1896	6-16	Oregon	1889	7-18
.....	1887	7-16	Pennsylvania	1895	8-17
.....	1883	7-16	Rhode Island	1883	7-16
.....	1897	7-16	South Carolina ³ .....	.....	.....
.....	1902	7-16	South Dakota	1883	7-16
.....	1874	7-16	Tennessee	1905	7-17
.....	1896	7-16	Texas	1915 ⁴	7-16
.....	1910	7-16	Utah	1890	6-18
.....	1875	7-15	Vermont	1867	7-16
.....	1902	7-16	Virginia ⁵ .....	.....	.....
setts	1852	7-16	Washington	1871	8-16
.....	1871	6-16	West Virginia	1897	7-16
a	1885	7-16	Wisconsin	1879	7-16
ol ² .....	.....	.....	Wyoming	1876	7-17
.....	1905	7-16			

enactment of 1st compulsory school attendance law. ² Mississippi repealed its compulsory attendance law in 1955. ³ South Carolina repealed its compulsory attendance law in 1955. ⁴ A compulsory school attendance law was passed in a law of 1873 establishing free public schools. However, the provision was omitted in subsequent laws. ⁵ Virginia repealed its compulsory attendance law in 1959.

Enrollment in Full-time Day Schools, 1909-56*

Source: U. S. Office of Education.

Instruction, by type of school	1909-1910	1919-1920	1929-1930	1939-1940	1949-1950	1955-1956
Public ¹	293,970 ²	481,266	723,443	594,647	1,034,203	1,564,396
.....	52,219 ²	29,683	54,456	57,341	133,000	263,000
schools for exceptional children	(³)	(³)	5,164 ⁴	5,777	4,459 ⁵	(³)
.....	(³)	(³)	3,400	3,144	3,650	10,806
.....	346,189	510,949	786,463	660,909	1,175,312	1,838,202
.....
clusive: Public ¹	16,604,821	18,897,661	20,555,150	18,237,451	18,352,603	22,725,861
.....	1,506,218	1,455,878	2,255,430	2,095,938	2,574,777 ⁷	3,623,360 ⁷
schools for exceptional children	71,307	99,234 ⁸	124,153 ⁴	55,954	48,894 ⁵	61,700 ⁹
.....	(³)	(³)	18,644	76,769	55,655	82,961
-8	18,182,346	20,452,773	22,953,377	20,466,112	21,031,929	26,493,882
.....	18,528,535	20,963,722	23,739,840	21,127,021	22,207,241	28,332,084
.....
Public high schools ¹	915,061	2,200,389	4,399,422	6,601,444	5,724,621	6,872,586
.....	117,400	213,920	341,158	457,768	672,362 ⁷	823,000 ⁷
schools for exceptional children	4,005	4,500 ⁸	4,388 ⁴	9,727	9,784 ⁵	18,400 ⁷
.....	78,932	81,367	66,832	61,040	46,242	60,989
-12 ¹⁰	1,115,398	2,500,176	4,811,800	7,129,979	6,453,009	7,774,975
.....	19,643,933	23,463,898	28,551,640	28,257,000	28,660,250	36,107,059
.....
on: Publicly controlled	166,560	315,382	532,647	796,531	1,354,902	1,687,000 ⁷
.....	188,655	282,498	568,090	697,672	1,304,119	1,309,000 ⁷
.....	355,215	597,880	1,100,737	1,494,203	2,659,021	2,996,000 ⁷
.....	19,999,148	24,061,778	29,652,377	29,751,203	31,319,271	39,103,059

Include subcollegiate departments of institutions of higher education, residential schools for exceptional children, Federal schools. ² 1911-12. ³ Not available. ⁴ 1926-27. ⁵ 1945-46. ⁶ Subcollegiate departments of institutions of higher education, and Federal schools. ⁷ Estimated. ⁸ 1917-18. ⁹ Estimated; includes enrollment in postgraduate. ¹⁰ Does not include schools of nursing not affiliated with institutions of higher education. * Latest Office of Education figures.

Statistics of State School Systems, 1947-58

Source: U. S. Office of Education.

Years	Enrollment					High-school graduates		Current expenditure per pupil in average daily attendance	Expenditure per pupil for text books
	Total	Kindergarten through grade 8		Grades 9 through 12 and postgraduate					
		Boys	Girls	Boys	Girls	Boys	Girls		
1947-1948 . . .	23,944,532	9,429,268	8,861,959	2,747,061	2,906,244	507,649	565,529	179.43	37.5
1949-1950 . . .	25,111,000	10,018,000	9,387,000	2,812,000	2,895,000	505,394	558,050	208.83	48.1
1951-1952 . . .	26,563,000	10,649,000	10,032,000	2,885,000	2,997,000	501,723	553,863	244.24	53.1
1953-1954* . .	28,836,000	11,609,000	10,937,000	3,085,000	3,205,000	544,575	584,966	264.76	72.1
1955-1956 . . .	31,162,800	12,491,700	11,798,500	3,415,700	3,456,900	606,502	645,552	294.22	75.6
1957-1958 . . .	33,529,000	13,239,000	12,430,000	3,865,000	3,995,000	647,651	684,642	341.00	101.8

* Number of boys and girls in elementary and secondary schools in 1953-54 are estimated from total enrollment.

Federal Government Funds for Education, 1956-57

Source: U. S. Office of Education.

Classification of programs by department or agency		Amount	Classification of programs by department or agency		Amount
Elementary & secondary education.....		\$ 656,632,000	In-service training of civilian personnel.....		\$ 34,478,000
Department of Health, Education & Welfare		210,027,000	Department of Health, Education & Welfare		1,500,000
Department of Agriculture.....		320,658,000	Department of Commerce.....		1,800,000
Department of Defense.....		24,375,000	Department of Defense.....		1,800,000
Department of the Interior.....		89,527,000	Federal Deposit Insurance Corporation.....		34,478,000
Department of the Treasury.....		23,000	Education of Merchant Marine and military personnel for defense.....		34,478,000
Atomic Energy Commission.....		4,097,000	Department of Commerce.....		2,800,000
Canal Zone.....		3,615,000	Department of Defense.....		28,000
District of Columbia.....		4,310,000	Department of the Treasury.....		3,300,000
Higher education.....		1,032,524,000	Research in educational institutions.....		133,000
Department of Health, Education & Welfare		196,839,000	Department of Health, Education & Welfare		11,500,000
Department of Defense.....		14,740,000	Department of Agriculture.....		78,700,000
Department of the Treasury.....		25,000	Atomic Energy Commission.....		26,600,000
Veterans Administration.....		813,955,000	National Advisory Committee for Aeronautics.....		5,000,000
National Science Foundation.....		6,965,000	National Science Foundation.....		15,200,000
Adult education.....		87,220,000	Tennessee Valley Authority.....		5,000,000
Department of Health, Education & Welfare		70,706,000	International education.....		50,100,000
Department of the Interior.....		898,000	Department of Health, Education & Welfare		5,000,000
Department of Justice.....		530,000	Department of Commerce.....		5,000,000
Department of Labor.....		3,399,000	Department of Labor.....		2,500,000
Canal Zone.....		32,000	Department of State.....		47,100,000
Federal Civil Defense Administration.....		707,000	TOTAL.....		\$1,997,800,000
National Science Foundation.....		10,948,000			

Special Schools & Classes for Exceptional Children, 1952-53¹

Source: U. S. Office of Education.

Type ²	No. of—		Enrollment		No. Teachers
	States reporting ³	Places reporting	Elementary schools	Secondary schools	
Mentally retarded.....	48	1,244	84,878	28,687	7,000
Speech-defective.....	49	1,087	254,179	52,568	2,200
Crippled.....	45	596	15,924	1,889	1,400
Hard-of-hearing.....	46	497	9,680	2,252	400
Partially seeing.....	39	408	6,544	1,470	600
Special health problems.....	40	330	10,166	1,289	800
Deaf.....	34	185	3,446	489	400
Blind.....	19	67	658	181	100
Mentally gifted.....	15	27	3,683	19,233	900
TOTAL.....	49	1,785 ⁴	389,158	108,058	14,300

¹ Public schools only; continental U. S. These are the latest data available. ² Excludes truant, delinquent, maladjusted children; home-and-hospital-bound children; exceptional children enrolled in residential schools. ³ Includes both full-time and part-time teachers. A teacher serving more than one type of exceptional child is reported only with the type to which she devotes the major portion of her time. ⁴ Total reporting a problem for one or more of the specified types of exceptional children.

High-school and College Graduates, 1900-58

(Public and private schools)

Source: U. S. Office of Education.

Year of graduation	HIGH SCHOOL			COLLEGE*		
	Men	Women	Total	Men	Women	Total
.....	38,075	56,808	94,883	22,173	5,237	27,410
.....	63,676	92,753	156,429	28,762	8,437	37,199
.....	123,684	187,582	311,266	31,980	16,642	48,622
.....	300,376	366,528	666,904	73,615	48,869	122,484
.....	578,718	642,757	1,221,475	109,546	76,954	186,500
.....	562,863	627,046	1,189,909	175,615	95,571	271,186
.....	570,700	629,000	1,199,700	328,841	103,217	432,058
.....	562,500	619,300	1,181,800	278,240	104,306	382,546
.....	569,200	627,300	1,196,500	225,981	104,005	329,986
.....	572,800	625,500	1,198,300	199,793	103,256	303,049
.....	612,500	663,600	1,276,100	186,528	104,297	290,825
.....	645,300	699,100	1,344,400	182,463	102,675	285,138
.....	679,500	735,300	1,414,800	198,233	110,579	308,812
.....	701,000	757,000	1,458,000	221,231	116,432	337,663
.....	731,000	791,000	1,522,000	240,990	121,564	362,554

degree in given field of study. † High-school graduates are estimated.

Enrollment in Vocational Classes, 1959*

Source: U. S. Office of Education.

Program	Evening classes	Part-time classes	Day classes	All classes
.....	235,266	55,507	466,450	757,223
cs.....	581,652	75,810	928,398	1,585,860
dustry.....	512,480	174,831	280,803	968,114
cupations.....	274,135	36,456	.....	310,591
ng.....	9,063†	.....	21,706†	30,769
s.....	29,321†	.....	19,243†	48,564
.....	1,641,917	342,604	1,716,600	3,701,121

al figures, subject to final review of state reports. † Extension. ‡ Preparatory.

Number Surviving Through College Entrance per 1,000 Pupils

Source: U. S. Office of Education.

Year	1938-1939	1939-1940	1940-1941	1942-1943	1943-1944	1944-1945	1945-1946	1946-1947	1947-1948	1948-1949	1949-1950	1950-1951
.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
.....	955	963	968	954	972	952	959	954	971	984	984	981
.....	908	916	910	909	914	929	944	945	948	956	967	968
.....	853	846	836	847	870	858	875	919	919	929	920	921
.....	796	781	781	807	827	848	872	872	858	863	874	885
.....	655	673	697	713	745	748	766	775	748	795	795	809
.....	532	552	566	604	630	650	662	641	670	706	698	711
.....	444	476	507	539	557	549	552	583	594	619	611	623
.....	419	450	481	505	524	522	524	553	559	581	573	584
ion.....	1946	1947	1948	1950	1951	1952	1953	1954	1955	1956	1957	1958
.....	*	*	*	205	218	234	266	283	286	301	303	308

for veteran students, it is not possible to calculate retention rates.

White and Negro School Statistics, 1953-54*

(Public elementary and secondary schools in 17 Southern states and the District of Columbia)

Source: U. S. Office of Education.

State	Enrollment		Instructional staff ¹		Average annual salary of instructional staff		Expenditures ² in A.D.A.
	White	Negro	White	Negro	White	Negro	White
Alabama.....	460,507	243,140	15,764	7,912	\$2,834	\$2,681	\$111.99
Arkansas.....	315,111	99,844	10,907	2,902	2,360	2,008	99.08
Delaware.....	47,237	9,968	2,109	411	.....	.....	.....
D. C.....	49,106	60,029	1,770	1,941	4,998	4,614	240.27
Florida.....	487,698	140,779	17,836	5,300	3,836	3,613	175.92
Georgia.....	533,508	274,123	19,848	8,576	.....	.....	.....
Kentucky.....	553,051	38,517	18,843	1,422	.....	.....	.....
Louisiana.....	343,914	208,577	13,228	6,342	.....	.....	165.08
Maryland.....	338,308	89,984	12,691	3,022	.....	.....	.....
Mississippi.....	263,478	263,930	9,609	6,777	2,261	1,302	98.15
Missouri.....	637,705	65,962	23,564	2,034	.....	.....	.....
North Carolina.....	683,284	284,782	23,971	8,944	3,335	3,406	132.46
Oklahoma.....	446,989	36,111	17,521	1,615	3,265	3,346	161.57
South Carolina.....	304,908	234,529	11,219	7,181	.....	.....	.....
Tennessee.....	598,247	118,048	20,329	3,771	.....	.....	.....
Texas.....	1,388,828	215,465	50,717	7,697	.....	.....	.....
Virginia.....	523,165	172,112	19,252	5,868	3,076	3,104	.....
West Virginia.....	426,345	25,646	15,437	983	.....	.....	.....
TOTAL.....	8,401,389	2,581,546	304,615	82,698	.....	.....	.....

¹ Includes supervisors, principals, teachers, etc. ² For instruction. ³ Average daily attendance. * Latest available.

Degrees Granted by Institutions of Higher Education, 1958-59

(Aggregate United States¹)

Source: U. S. Office of Education.

Field of study	Bachelor's and first professional		Second level (master's, except first professional)		Doctor's	
	Men	Women	Men	Women	Men	Women
Agriculture.....	5,348	73	997	17	336	.....
Architecture.....	1,639	74	286	4	3	.....
Biological sciences.....	11,503	3,646	1,543	459	933	.....
Business and commerce.....	49,285	3,823	4,282	154	133	.....
Education.....	26,448	61,429	16,954	14,615	1,297	.....
Engineering.....	38,013	121	6,729	24	713	.....
English and journalism.....	8,896	11,871	1,463	1,335	317	.....
Fine and applied arts.....	6,131	6,591	1,604	1,057	233	.....
Foreign languages and literature.....	1,865	2,902	556	510	182	.....
Health professions.....	15,344	8,944	1,018	764	145	.....
Dentistry, D.D.S. and D.M.D. only.....	3,136	14	.....	.....	.....	.....
Medicine, M.D. only.....	6,494	374	.....	.....	.....	.....
Nursing.....	69	6,222	6	510	.....	.....
Pharmacy.....	3,414	400	111	11	64	.....
Other.....	2,231	1,934	901	243	81	.....
Home economics.....	42	4,448	11	496	4	.....
Law.....	9,661	264	481	15	26	.....
Mathematical subjects.....	6,504	2,515	1,188	311	267	.....
Physical sciences.....	13,694	1,766	2,909	270	1,743	.....
Chemistry (excl. biochemistry).....	5,897	1,411	981	164	960	.....
Physics.....	3,668	141	885	30	473	.....
Other.....	4,129	214	1,043	76	310	.....
Psychology.....	4,477	2,906	857	397	537	.....
Religion.....	7,451	1,359	951	238	250	.....
Social sciences.....	35,479	14,261	4,368	1,122	1,058	.....
Economics.....	7,079	644	604	60	211	.....
History.....	9,586	4,156	1,239	404	276	.....
Political science or government.....	5,223	1,164	539	110	176	.....
Sociology.....	3,127	3,750	321	140	141	.....
Other.....	10,464	4,547	1,665	408	254	.....
TOTAL ²	254,868	130,283	47,321	22,176	8,371	.....

¹ Includes the 48 contiguous states, D. C., Alaska, Hawaii and outlying parts. ² Includes studies not in this table.

School Enrollment, 5 to 34 Years Old, October 1957 to October 1959

Source: U. S. Bureau of the Census.

Age and sex	October 1957		October 1958		October 1959	
	Number enrolled	% enrolled	Number enrolled	% enrolled	Number enrolled	% enrolled
MALE						
5 to 14 years.....	2,963,000	78.3	3,123,000	80.6	3,158,000	79.5
15 to 17 years.....	11,584,000	99.5	12,059,000	99.5	12,556,000	99.3
18 to 24 years.....	4,646,000	91.1	4,854,000	90.7	5,041,000	91.4
25 to 34 years.....	780,000	43.3	898,000	47.5	918,000	45.6
FEMALE						
5 to 14 years.....	897,000	21.3	915,000	21.0	892,000	19.6
15 to 17 years.....	493,000	9.5	483,000	9.5	446,000	8.9
18 to 24 years.....	146,000	2.6	165,000	2.9	181,000	3.3
25 to 34 years.....	21,509,000	57.5	22,497,000	58.7	23,192,000	59.1
TOTAL						
5 to 14 years.....	2,866,000	79.0	2,978,000	80.2	3,064,000	80.5
15 to 17 years.....	11,121,000	99.5	11,564,000	99.4	12,070,009	99.6
18 to 24 years.....	4,421,000	87.8	4,591,000	87.6	4,798,000	89.0
25 to 34 years.....	629,000	28.1	667,000	29.4	683,000	29.2
TOTAL						
5 to 14 years.....	439,000	8.2	393,000	7.3	391,000	7.1
15 to 17 years.....	111,000	1.9	121,000	2.2	92,000	1.7
18 to 24 years.....	70,000	1.1	90,000	1.5	80,000	1.3
25 to 34 years.....	19,657,000	50.0	20,404,000	51.0	21,178,000	52.0
TOTAL						
5 to 14 years.....	5,829,000	78.6	6,101,000	80.4	6,222,000	80.0
15 to 17 years.....	22,705,000	99.5	23,623,000	99.5	24,626,000	99.4
18 to 24 years.....	9,067,000	89.5	9,446,000	89.2	9,839,000	90.2
25 to 34 years.....	1,409,000	34.9	1,564,000	37.6	1,601,000	36.8
TOTAL						
5 to 14 years.....	1,336,000	14.0	1,307,000	13.4	1,283,000	12.7
15 to 17 years.....	604,000	5.5	603,000	5.7	538,000	5.1
18 to 24 years.....	216,000	1.8	255,000	2.2	261,000	2.2
25 to 34 years.....	41,166,000	53.6	42,900,000	54.8	44,370,000	55.5

Figures include children enrolled in kindergarten.

Estimated Public and Private School Enrollment, By Type of School, 1958-60

Source: U. S. Office of Education.

Type of School	Enrollment		Type of School	Enrollment	
	1958-59	1959-60		1958-59	1959-60
Elementary through			Other schools ²	90,000	90,000
5 to 14 years.....	26,780,000	27,800,000	Total, grades 9 through 12.....	8,940,000	9,590,000
Parochial schools.....	5,060,000	5,400,000	Higher Education		
State ²	170,000	180,000	Universities, colleges, profes-		
Kindergarten through			sional schools, including junior		
5 to 14 years.....	32,010,000	33,380,000	colleges and normal schools...	3,590,000	3,750,000
Through 12			Grand total	44,540,000	46,720,000
5 to 14 years.....	7,840,000	8,400,000			
Parochial schools.....	1,100,000	1,100,000			

Include enrollments for the entire school or college year. ² Includes Federal schools for Indians, federal elementary-secondary schools on posts, model and practice schools in teacher-training institutions, departments of colleges, and residential schools for exceptional children.

Academic Degree Abbreviations

Source: *American Universities and Colleges*, 1960, pub. by American Council on Education.

A.B. Bachelor of Arts	G.N. Graduate Nurse
Ae.E. Aeronautical Engineer	I.E. Industrial Engineer
A.M. Master of Arts	J.D. Doctor of Jurisprudence
A.M.T. Master of Arts in Teaching	J.S.D. Doctor of the Science of Law
B.A. Bachelor of Arts	L.H.D. Doctor of Humane Letters
B.A.E. Bachelor of Arts in Education, or Bachelor of Art Education, Aeronautical Engineering, Agricultural Engineering, or Architectural Engineering	Litt.M. Master of Letters
B.Ag. Bachelor of Agriculture	LL.B. Bachelor of Laws
B.App.Arts Bachelor of Applied Arts	LL.D. Doctor of Laws
B.Arch. Bachelor of Architecture	LL.M. Master of Laws
B.B.A. Bachelor of Business Administration	M.A. Master of Arts
B.C.E. Bachelor of Civil Engineering	M.Aero.E. Master of Aeronautical Engineering
B.Ch.E. Bachelor of Chemical Engineering	M.B.A. Master of Business Administration
B.D. Bachelor of Divinity	M.C.E. Master of Civil Engineering
B.E. Bachelor of Education or Bachelor of Engineering	M.C.S. Master of Commercial Science
B.E.E. Bachelor of Electrical Engineering	M.D. Doctor of Medicine
B.F. Bachelor of Forestry	M.E. Mechanical Engineer or Master of Education
B.F.A. Bachelor of Fine Arts	M.Ed. Master of Education
B.J. Bachelor of Journalism	M. Eng. Mining Engineer or Master of Engineering
B.L.S. Bachelor of Library Science	M.F. Master of Forestry
B.Litt. Bachelor of Literature	M.F.A. Master of Fine Arts
B.M. Bachelor of Medicine or Bachelor of Music	M.L.S. Master of Library Science
B.Mus. Bachelor of Music	M.M. Master of Music
B.N. Bachelor of Nursing	M.M.E. Master of Mechanical Engineering Master of Music Education
B.Pharm. Bachelor of Pharmacy	M.Mus. Master of Music
B.R.E. Bachelor of Religious Education	M. Nurs. Master of Nursing
B.S. Bachelor of Science	M.P.A. Master of Public Administration, Professional Accounting or Public Affairs
B.Th. Bachelor of Theology	M.P.H. Master of Public Health
C.E. Civil Engineer	M.R.E. Master of Religious Education
Chem.E. Chemical Engineer	M.S. Master of Science
D.D. Doctor of Divinity	M.S.W. Master of Social Work
D.D.S. Doctor of Dental Surgery or Doctor of Dental Science	M.Th. Master of Theology
D.L.S. Doctor of Library Science	N.E. Nuclear Engineer
D.M.D. Doctor of Dental Medicine	O.D. Doctor of Optometry
D.O. Doctor of Osteopathy	Pharm.D. Doctor of Pharmacy
D.M.S. Doctor of Medical Science	Ph.B. Bachelor of Philosophy
D.P.A. Doctor of Public Administration	Ph.C. Pharmaceutical Chemist
D.P.H. Doctor of Public Health	Ph.D. Doctor of Philosophy
D.R.E. Doctor of Religious Education	Ph.M. Master of Philosophy
D.S.W. Doctor of Social Welfare	S.B. Bachelor of Science
D.Sc. Doctor of Science	Sc.D. Doctor of Science
D.V.M. Doctor of Veterinary Medicine	S.J.D. Doctor of Juridical Science
E.A.A. Engineer in Aeronautics and Astro- nautics	S.Sc.D. Doctor of Social Science
Ed.D. Doctor of Education	S.T.B. Bachelor of Sacred Theology
E.E. Electrical Engineer	S.T.D. Doctor of Sacred Theology
E.M. Engineer of Mines	S.T.M. Master of Sacred Theology
E.Met. Engineer of Metallurgy	Th.B. Bachelor of Theology
	Th.D. Doctor of Theology
	Th.M. Master of Theology

Academic Costume: Colors Associated with Fields

Agriculture	Maize	Medicine	Green
Arts, Letters, Humanities	White	Music	Pink
Commerce, Accountancy, Business	Drab	Nursing	Apricot
Dentistry	Lilac	Pharmacy	Olive green
Economics	Copper	Philosophy	Dark blue
Education	Light Blue	Physical Education	Sage green
Engineering	Orange	Public Admin., including Foreign Service	Peacock blue
Fine Arts, Architecture	Brown	Public Health	Salmon pink
Forestry	Russet	Science	Golden yellow
Journalism	Crimson	Social Work	Citron
Law	Purple	Theology	Scarlet
Library Science	Lemon	Veterinary Science	Gray

Accredited U. S. Colleges and Universities

Spring Semester, 1960

Schools fully accredited by at least one of the six regional accrediting associations are listed. The number of students is for matriculated undergraduate and graduate students who are working for a degree.

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
Abilene College; Abilene, Tex. (1906)	Don H. Morris	1,686 C	Church of Christ ³
College of Colorado; Alamosa, Colo. (1921)	Fred J. Plachy	1,414 C	State
College; Garden City & Sayville, N. Y. (1896)	Paul Dawson Eddy	2,591 C	Private
College; Adrian, Mich. (1845)	John H. Dawson	724 C	Methodist ³
College; Decatur, Ga. (1889)	Wallace M. Alston	627 F	Presbyterian ³
University of; Akron, Ohio (1870)	Norman P. Auburn	4,759 C	City
University of; Tuscaloosa, Ala. (1831) ⁴	Frank A. Rose	13,095 C	State
College; Montevallo, Ala. (1896)	Howard M. Phillips	994 C	State
Technic Institute. See Auburn University			
University of; College, Alaska (1922) ⁴	Ernest N. Patty	790 C	State
College; Albany, Ga. (1903)	W. H. Dennis, Jr.	772 C	State
College; Albany, N. Y. (1836)	Sister Marie Louise	315 F	Catholic ³
College; New Haven, Conn. (1925)	W. W. Whitehouse	1,324 C	Methodist ³
College; Albion, Mich. (1835)	H. V. Masters	840 C	Evan. Un. Breth. ³
College; Reading, Pa. (1856)	Richard E. Shearer	455 C	Baptist ³
College; Philippi, W. Va. (1871)	M. Ellis Drake	1,365 C	Private
College; Alfred, N. Y. (1836)	Lawrence L. Pelletier	1,133 C	Methodist ³
College; Meadville, Pa. (1815)	Arthur P. Coleman	232 C	Private
College; Cambridge Springs, Pa. (1912)	Robert D. Swanson	624 C	Presbyterian
College; Alma, Mich. (1886)	Sister M. Augustine	1,000 F	Catholic ³
College; Milwaukee, Wis. (1890)	R. Adm. John F. Hines	1,446 C	Private
International College; Springfield, Mass. (1885)	Hurst R. Anderson	5,578 C	Methodist
University; Washington, D. C. (1893)	Calvin Hastings Plimpton	966 M	Private
College; Amherst, Mass. (1821)	Robert H. Reardon	939 C	Church of God
College & Theological Seminary; Anderson, Ind. (1917)	Sister Irene Marie	345 F	Catholic ³
College; Paxton, Mass. (1946)	Mother Claire Helen	205 F	Catholic ³
College; South Woodstock, Conn. (1941)	James P. Dixon, Jr.	1,289 C	Private
College; Yellow Springs, Ohio (1852)	W. H. Plemmons	1,971 C	State
State Teachers College; Boone, N. C. (1903)	Msgr. A. F. Bukowski	753 C	Catholic
College; Grand Rapids, Mich. (1922)	Richard A. Harvill	10,812 C	State
University of; Tucson, Ariz. (1885)	J. Lawrence Walkup	1,605 C	State
College; Flagstaff, Ariz. (1899)	H. D. Richardson ⁵	9,641 C	State
University; Tempe, Ariz. (1885)	David W. Mullins	5,086 C	State
University of; Fayetteville & Little Rock, Ark. (1871)	J. W. Mears	861 C	State
College; College Heights, Ark. (1909)	Lawrence A. Davis	1,390 C	State
College; Normal College; Pine Bluff, Ark. (1873)	Paul M. McCain	228 C	Presbyterian
College; Batesville, Ark. (1872)	J. W. Hull	1,156 C	State
Technic College; Russellville, Ark. (1909)	Carl R. Reng	3,012 C	State
College; Jonesboro & Beebe, Ark. (1909)	Silas D. Snow	1,572 C	State
College; Conway, Ark. (1907)	J. R. Woolf	5,732 C	State
College; Arlington, Tex. (1917)	E. A. Adams	987 C	Private
College; Los Angeles, Calif. (1930)	Z. T. Johnson	900 C	Private
College; Wilmore, Ky. (1890)	Glenn L. Clayton	615 C	Brethren ²
College; Ashland, Ohio (1878)	V. Rev. A. H. Desautels	276 M ⁶	Catholic ³
College; Worcester, Mass. (1904)			
University System:			
University; Atlanta, Ga. (1865)	Rufus E. Clement	494 C	Private
College; Atlanta, Ga. (1867)	Benjamin E. Mays	723 M	Baptist ³
College; Atlanta, Ga. (1881)	Albert E. Manley	532 F	Baptist ³
College; Wilson, N. C. (1902)	Arthur D. Wenger	1,143 C	Disc. of Christ
College; South Lancaster, Mass. (1882)	Robert L. Reynolds	586 C	7th Day Adven.
University; Auburn, Ala. (1856) ⁷	Ralph Brown Draughon	8,013 C	State
College and Theological Seminary; Minneapolis (1869)	Bernhard M. Christensen	942 C	Lutheran
College; Rock Island, Ill. (1860)	Conrad Bergendoff	1,298 C	Lutheran
College; Sioux Falls, S. Dak. (1860)	Lawrence M. Stavig	1,340 C	Lutheran
College; Aurora, Ill. (1893)	Theodore P. Stephens	798 C	Adven. Christ.
College; Sherman, Tex. (1849)	J. D. Moseley	821 C	Presbyterian
State College; Clarksville, Tenn. (1927)	Halbert Harvill	1,330 C	State
College; Babson Park, Mass. (1919)	Gordon M. Trim	675 M	Private
College; Baldwin, Kans. (1858)	W. J. Scarborough	543 C	Methodist
College; Berea, Ohio (1845)	Alfred Bryan Bonds, Jr.	2,168 C	Methodist ³
College; Muncie, Ind. (1918)	John R. Emens	5,625 C ⁸	State
College of the Sacred Heart; Lake Forest, Ill. (1919)	Mother Margaret Burke	358 F	Catholic ³
College; Concord, N. C. (1867)	L. S. Cozart	227 C	Presbyterian
College; Annandale-on-Hudson, N. Y. (1860)	Rev. Reamer Kline	270 C	Episcopal ³
College; New York, N. Y. (1889) ⁹	Millicent C. McIntosh	1,392 F	Private

Institution, location and (date founded)	Chief executive ¹	Students ²	Cont ³
Barry College; Miami, Fla. (1940).....	Rev. Mother M. G. Barry	728 F ⁸	Catholic
Bates College; Lewiston, Maine (1864).....	Charles F. Phillips	856 C	Private
Baylor University; Waco, Houston, & Dallas, Tex. (1845).....	William R. White	4,513 C	Baptist
Beaver College; Jenkintown, Pa. (1853).....	Edward D. Gates	656 F	Presbyteri
Belhaven College; Jackson, Miss. (1883).....	McFerran Crowe	245 C	Presbyteri
Bellarmino College; Louisville, Ky. (1950).....	Rt. Rev. A. F. Horrigan	899 M ⁶	Catholic
Belmont Abbey College; Belmont, N. C. (1876).....	V. Rev. Cuthbert E. Allen	639 Co	Catholic
Beloit College; Beloit, Wis. (1846).....	Miller Upton	952 C	Congregat
Bemidji State College; Bemidji, Minn. (1919).....	Charles R. Sattgast	1,562 C	State
Bennett College; Greensboro, N. C. (1873).....	Willa B. Player	490 F	Methodist
Bennington College; Bennington, Vt. (1932).....	William C. Felo	357 F ⁸	Private
Berea College; Berea, Ky. (1855).....	Francis S. Hutchins	1,157 C	Private
Berry College; Mount Berry, Ga. (1902).....	John R. Bertrand	538 C	Private
Bethany College; Bethany, W. Va. (1840).....	Perry E. Gresham	592 C	Disc. of Ch
Bethany College; Lindsborg, Kans. (1881).....	L. Dale Lund	610 C	Lutheran
Bethany Nazarene College; Bethany, Okla. (1909).....	Roy H. Cantrell	1,112 C	Nazarene
Bethel College; McKenzie, Tenn. (1842).....	Roy N. Baker	500 C	Presbyteri
Bethel College; North Newton, Kans. (1888).....	Vernon Neufeld	533 C ¹⁰	Mennonite
Bethel College and Seminary; St. Paul, Minn. (1871).....	Carl H. Lundquist	643 C	Baptist
Birmingham-Southern College; Birmingham, Ala. (1856).....	Henry King Stanford	1,026 C	Methodist
Black Hills Teachers College; Spearfish, S. Dak. (1883).....	Russell E. Jonas	650 C	State
Blackburn College; Carlinville, Ill. (1857).....	Robert P. Ludlum	361 C	Presbyteri
Bloomsburg State College; Bloomsburg, Pa. (1839) ¹¹	Harvey A. Andruss	1,600 C	State
Blue Mountain College; Blue Mountain, Miss. (1873).....	Lawrence T. Lowrey	286 F ⁶	Baptist
Bluefield State College; Bluefield, W. Va. (1895).....	L. B. Allen	634 C	State
Bluffton College; Bluffton, Ohio (1900).....	Lloyd L. Ramseyer	358 C	Mennonite
Boston College; Chestnut Hill, Weston & Lenox, Mass. (1863).....	V. Rev. Michael P. Walsh	7,646 C	Catholic ⁹
Boston University; Boston, Mass. (1839).....	Harold C. Case	17,368 C	Methodist ⁹
Bowdoin College; Brunswick, Maine (1794).....	James S. Coles	791 M	Private
Bowling Green State University; Bowling Green, Ohio (1910) ⁴	R. W. McDonald	5,695 C	State
Bradley University; Peoria, Ill. (1897).....	Harold P. Rodes	4,550 C	Private
Brandeis University; Waltham, Mass. (1948).....	Abram L. Sachar	1,427 C	Private ¹²
Brescia College; Owensboro, Ky. (1925).....	Sister JoanMarieLechner	625 C	Catholic ⁹
Briar Cliff College; Sioux City & Dubuque, Iowa (1930).....	Sister Mary Matilda	413 F	Catholic ⁹
Bridgeport, University of; Bridgeport, Conn. (1927).....	James H. Halsey	3,680 C	Private
Bridgewater College; Bridgewater, Va. (1880).....	Warren D. Bowman	554 C	Brethren ²
Brigham Young University; Provo, Utah (1875).....	E. L. Wilkinson	10,069 C	Latter-day
Brooklyn, Polytechnic Inst. of; Brooklyn & Freeport, N. Y. (1854).....	Ernst Weber	4,518 C	Private
Brooklyn College. See New York, College of the City of.....			
Brown University; Providence, R. I. (1764).....	Barnaby C. Keeney	3,300 C, Co ¹³	Private
Bryn Mawr College; Bryn Mawr, Pa. (1885).....	Katharine E. McBride	962 F ⁶	Private
Bucknell University; Lewisburg, Pa. (1846).....	Merle M. Odgers	2,142 C	Private
Buena Vista College; Storm Lake, Iowa (1891) ¹⁴	John A. Fisher	523 C	Presbyteria
Buffalo, University of; Buffalo, N. Y. (1846).....	C. C. Furnas ¹⁵	9,889 C	Private
Butler University; Indianapolis, Indiana (1855).....	M. O. Ross	3,513 C	Disc. of Chr
Caldwell College for Women; Caldwell, N. J. (1939).....	Sister M. Marguerite	429 F	Catholic ⁹
California, University of; Berkeley, Calif. (1868).....	Clark Kerr	44,878 C ¹⁶	State
Berkeley Campus.....	Glenn T. Seaborg ¹⁶	19,937 C ¹⁶	State
Davis Campus.....	Emil M. Mrak ¹⁶	2,470 C ¹⁶	State
La Jolla Campus.....	Roger R. Revelle ¹⁷	44 C ¹⁶	State
Los Angeles Campus (UCLA).....	Franklin D. Murphy ¹⁵	16,669 C ¹⁶	State
Riverside Campus.....	Herman T. Spieth ¹⁵	1,266 C ¹⁶	State
San Francisco Campus.....	J. B. DeC. M. Saunders ¹⁸	1,660 C ¹⁶	State
Santa Barbara Campus.....	Samuel B. Gould ¹⁵	2,879 C ¹⁶	State
California College of Arts & Crafts; Oakland, Calif. (1907).....	Harry X. Ford ⁹	689 C	Private
California Institute of Technology; Pasadena, Calif. (1891).....	Lee A. DuBridge	1,243 M ⁶	Private
California School of Fine Arts, San Francisco, Calif. (1874).....	Gurdon Woods ¹⁷	176 C	Private
California State College; California, Pa. (1852) ¹¹	Michael Duda	1,891 C	State
California State Polytechnic College; San Luis Obispo, Calif. (1901) ⁴	Julian A. McPhee	5,473 C	State
California Western University; San Diego, Calif. (1924).....	William C. Rust	1,420 C	Methodist ⁹
Calvin College & Seminary; Grand Rapids, Mich. (1876).....	William Spoelhof	2,002 C	Christian P
Campbellsville College; Campbellsville, Ky. (1907).....	J. M. Carter	576 C	Baptist ⁹
Canisius College; Buffalo, N. Y. (1870).....	V. Rev. J. J. McGinley	2,086 M ⁶	Catholic ⁹
Capital University; Columbus, Ohio (1830).....	Harold L. Yochum	1,230 C	Lutheran
Cardinal Stritch College; Milwaukee, Wis. (1937).....	Sister Mary Aquin	357 F	Catholic ⁹
Carleton College; Northfield, Minn. (1866).....	Laurence M. Gould	1,117 C	Protestant ¹
Carnegie Institute of Technology; Pittsburgh, Pa. (1900).....	John C. Warner	4,776 C	Private
Carroll College; Helena, Mont. (1909).....	R. Rev. R. G. Hunthausen	670 C	Catholic
Carroll College; Waukesha, Wis. (1846).....	Robert D. Steele	767 C	Presbyteri ⁹
Carson-Newman College; Jefferson City, Tenn. (1851).....	Harley Fite	1,311 C	Baptist
Carthage College; Carthage, Ill. (1847).....	Harold H. Lentz	468 C	Lutheran
Cascade College; Portland, Oreg. (1918).....	Edison Habegger	217 C	Private

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
State of Technology; Cleveland, Ohio (1880)	Kent H. Smith ⁵	2,093 M ⁶	Private
College; Salisbury, N. C. (1851)	Alvin R. Keppel	724 C	Un. Ch. of Christ ³
University of America; Washington, D. C. (1889)	Rt. Rev. W. J. McDonald ¹⁹	4,045 C	Catholic
University of Puerto Rico; Ponce, P. R. (1948) ⁴	Thomas A. Stanley ¹⁹	2,153 C	Catholic ³
College; Allentown, Pa. (1867)	Dale H. Moore	460 F	Un. Ch. of Christ ³
College of Louisiana; Shreveport, La. (1825)	Joe J. Mickle	1,613 C	Methodist
College; Fayette, Mo. (1854)	R. L. Woodward	672 C	Methodist
College; Pella, Iowa (1853)	G. T. Vander Lugt	423 C	Reformed ³
Connecticut State College; New Britain, Conn. (1849) ²⁰	Herbert D. Welte	2,884 C ¹⁰	State
Michigan University; Mt. Pleasant, Mich. (1892)	Judson W. Foust	4,553 C	State
Missouri State College; Warrensburg, Mo. (1871)	Warren C. Lovinger	3,292 C	State
College; Edmond, Okla. (1890)	W. Max Chambers	3,398 C	State
College; Wilberforce, Ohio (1886)	Charles H. Wesley	1,365 C	State
Washington College of Education; Ellensburg, Wash. (1890)	Perry H. Mitchell ¹⁶	1,945 C ³	State
College of Kentucky; Danville, Ky. (1819)	Thomas A. Spragens	417 C	Presbyterian ³
College; Orange, Calif. (1861)	John L. Davis	400 C	Disc. of Christ ³
College of; Charleston, S. C. (1770)	George D. Grice	267 C	Private
College; Pittsburgh, Pa. (1869)	Paul R. Anderson	500 F	Private
University of; Chattanooga, Tenn. (1886)	LeRoy A. Martin	2,055 C	Methodist ³
College; Philadelphia, Pa. (1871)	Sister Catharine Frances	555 F	Catholic ³
State College; Cheyney, Pa. (1837)	James H. Duckrey	733 C	State
School of The Art Institute of; Chicago, Ill. (1879)	Norman B. Boothby ²¹	741 C	Private
University of; Chicago, Ill. (1890)	L. A. Kimpton ¹⁵	5,778 C ³	Private
Teachers College; Chicago, Ill. (1869)	Raymond M. Cook ²¹	4,528 C	City
College; Chico, Calif. (1887)	Glenn Kendall	3,147 C	State
Art Institute; Los Angeles, Calif. (1921)	Mitchell A. Wilder ¹⁷	199 C	Private
Teachers College; Memphis, Tenn. (1854)	Brother Lambert Thomas	651 M	Catholic ³
University of; Cincinnati, Ohio (1819)	Walter C. Langsam	14,103 C	City
Military College of S. C.; Charleston S. C. (1842)	Gen. Mark W. Clark	1,850 M	State
See New York, College of the City of			
College; Claremont, Calif. (1925)	Robert J. Bernard	590 C	Private
Men's College; Claremont, Calif. (1946)	George Benson	380 M	Private
College; Clarion, Pa. (1867) ¹¹	P. G. Chandler	1,120 C	State
College; Atlanta, Ga. (1869)	James P. Brawley	778 C	Methodist
University; Worcester, Mass. (1887)	Howard B. Jefferson	863 Co	Private
College; Dubuque, Iowa (1843)	Sister Mary Benedict	812 F	Catholic ³
College of Technology; Potsdam, N. Y. (1896)	William G. Van Note	1,397 M	Private
Agricultural College; Clemson, S. C. (1889)	Robert C. Edwards	3,621 C	State
Cedar Rapids, Iowa (1851)	Joseph E. McCabe	785 C	Presbyterian ³
College; Hartsville, S. C. (1908)	Kenneth G. Kuehner ⁵	380 F ⁶	Private
College; Waterville, Maine (1813)	Robert Strider, III.	1,181 C	Private
University; Hamilton, N. Y. (1819)	Everett Case	1,389 M ⁶	Private
University of; Boulder, Colo. (1877) ⁴	Quigg Newton	9,747 C	State
College; Colorado Springs, Colo. (1874)	Louis T. Benezet	1,152 C	Private
State College; Greeley, Colo. (1890)	William R. Ross	4,002 C	State
State University; Fort Collins, Colo. (1870)	William E. Morgan	5,731 C	State
College; Columbia, S. C. (1854) ¹⁴	R. Wright Spears	624 F ⁶	Methodist ³
University; New York, N. Y. (1754) ³	Grayson Kirk	25,515 C, Co ¹⁵	Private
College; Athens, W. Va. (1875)	Jos. F. Marsh, Jr.	1,321 C	State
College; Moorehead, Minn. (1891)	Joseph L. Knutson	1,575 C	Lutheran
Teachers College; River Forest, Ill. (1864)	Rev. M. L. Koehneke	841 C	Lutheran
Teachers College; Seward, Nebr. (1894)	P. A. Zimmerman	632 C	Lutheran
Teachers College of. See Central Conn. State College			
University of; Storrs, Conn. (1881) ⁴	A. N. Jorgensen	10,756 C	State
College for Women; New London, Conn. (1911)	Rosemary Park	1,061 F ⁶	Private
College; Spartanburg, S. C. (1889)	Oliver C. Carmichael, Jr.	502 F ⁶	Private
College; New York, N. Y. (1859)	To be appointed	896 C	Private
College; Mount Vernon, Iowa (1853)	Russell D. Cole	661 C	Methodist ³
University; Ithaca & New York, N. Y. (1865)	Deane W. Malott	11,129 C	Private
University; Omaha, Nebr. (1878)	V. Rev. Carl M. Reinert	2,905 C	Catholic ³
College; Canton, Mo. (1853)	Fred Helsabeck	508 C	Disc. of Christ ³
University; Mitchell, S. Dak. (1885)	Jack Jones Early	497 C	Methodist ³
College; Blair, Nebr. (1884)	C. Clifford Madsen	817 C	Lutheran
College; Danbury, Conn. (1903)	Ruth A. Haas	883 C	State
College; Hanover, N. H. (1769)	John Sloan Dickey	3,068 M ⁸	Private
College; Nashville, Tenn. (1891)	Athens C. Pullias	1,104 C	Ch. of Christ ³
College; Davidson, N. C. (1830)	D. Grier Martin	912 M	Presbyterian
College; Elkins, W. Va. (1904)	David K. Allen	517 C	Presbyterian
University of; Dayton, Ohio (1850)	V. Rev. R. A. Roesch	5,807 C	Catholic ³
University of; Newark, Del. (1833)	J. A. Perkins	3,347 C	State
College; Dover, Del. (1891)	Jerome H. Holland	336 C	State
College; Cleveland, Miss. (1924)	James Milton Ewing	841 C	State

Institution location and (date founded)

Chief executive¹Students²

Control

Institution location and (date founded)	Chief executive ¹	Students ²	Control
Denison University; Granville, Ohio (1831).....	A. Blair Knapp.....	1,381 C	Baptist ³
Denver, University of; Denver, Colo. (1864).....	Chester M. Alter ¹⁵	4,455 C	Methodist ³
DePaul University; Chicago, Ill. (1898).....	V. Rev. C. J. O'Malley.....	6,834 C	Catholic ³
DePauw University; Greencastle, Ind. (1837).....	Russell J. Humbert.....	2,089 C	Methodist ³
Detroit, University of; Detroit, Mich. (1877).....	Rev. Celestin J. Steiner.....	10,809 C ¹⁸	Catholic ³
Dickinson College; Carlisle, Pa. (1773).....	Gilbert Malcolm.....	1,042 C	Methodist ³
Dillard University; New Orleans, La. (1930).....	Albert W. Dent.....	953 C	Cong. & Me ³
District of Columbia Teachers College; Washington, D. C. (1851).....	Paul O. Carr.....	1,361 C	City
Doane College; Crete, Nebr. (1872).....	Donald M. Typer.....	273 C	Congregat ³
Dominican College of San Rafael; San Rafael, Calif. (1890).....	Sister M. Patrick.....	521 F ⁶	Catholic ³
Douglass College; New Brunswick, N. J. (1918) ²²	Henry G. Harmon.....	1,652 F	State
Drake University; Des Moines, Iowa (1881).....	Fred G. Holloway.....	6,444 C	Private
Drew University; Madison, N. J. (1867).....	James Creese.....	837 C	Methodist ³
Drexel Institute of Technology; Philadelphia, Pa. (1891).....	Abraham A. Neuman.....	7,800 C	Private
Dropsie College; Philadelphia, Pa. (1907).....	James F. Findlay.....	155 C	Private
Drury College; Springfield, Mo. (1873).....	James F. Findlay.....	872 C	Un. Ch. of
Dubuque, University of; Dubuque, Iowa (1852).....	Gaylord M. Couchman.....	529 C	Presbyteria ³
Duchesne College of the Sacred Heart; Omaha, Nebr. (1881).....	Mother Dorothy Clark.....	290 F	Catholic ³
Duke University; Durham, N. C. (1838).....	A. Hollis Edens.....	5,624 C	Methodist ³
Dunbarton College of Holy Cross; Washington, D. C. (1935).....	Sister M. M. Dolores.....	344 F	Catholic ³
Duquesne University; Pittsburgh, Pa. (1878).....	Rev. H. J. McAnulty.....	5,340 C	Catholic ³
D'Youville College; Buffalo, N. Y. (1908).....	Sister Catherine of Siena.....	727 F	Catholic ³
Earlham College; Richmond, Ind. (1847).....	Landrum R. Bolling.....	815 C	Quaker
East Carolina College; Greenville, N. C. (1907).....	Leo W. Jenkins.....	3,835 C	State
East Central State College; Ada, Okla. (1909).....	Charles F. Spencer.....	1,615 C	State
East Stroudsburg State College; East Stroudsburg, Pa. (1893) ¹¹	LeRoy J. Koehler.....	1,126 C	State
East Tennessee State College; Johnson City, Tenn. (1911).....	Burgin E. Dossett.....	3,805 C	State
East Texas Baptist College; Marshall, Tex. (1914).....	H. D. Bruce.....	458 C	Baptist
East Texas State College; Commerce, Tex. (1889).....	James G. Gee.....	2,696 C	State
Eastern Baptist College; St. Davids, Pa. (1932).....	Gilbert L. Guffin.....	271 C	Baptist ³
Eastern Baptist Theological Seminary; Philadelphia, Pa. (1925).....	Gilbert L. Guffin.....	201 C	Baptist ³
Eastern Illinois University; Charleston, Ill. (1895).....	Quincy Doudna.....	2,645 C ¹⁸	State
Eastern Michigan University; Ypsilanti, Mich. (1849).....	Eugene B. Elliott.....	6,216 C	State
Eastern Montana College of Education; Billings, Mont. (1927).....	Herbert L. Steele.....	1,160 C ¹⁸	State
Eastern Nazarene College; Quincy, Mass. (1918).....	Edward S. Mann.....	559 C	Nazarene
Eastern New Mexico University; Portales, N. Mex. (1934).....	Floyd D. Golden.....	1,564 C	State
Eastern Oregon College; La Grande, Oreg. (1929).....	Frank B. Bennett.....	759 C	State
Eastern Washington College of Education; Cheney, Wash. (1890).....	Don S. Patterson.....	1,850 C	State
Edgewood College of the Sacred Heart; Madison, Wis. (1927).....	Sister Mary Nona.....	477 F	Catholic ³
Edinboro State College; Edinboro, Pa. (1857) ¹¹	Thomas R. Miller.....	1,158 C	State
Elizabethtown College, Elizabethtown, Pa. (1899).....	A. C. Baugher.....	933 C	Brethren ³
Elmhurst College; Elmhurst, Ill. (1871).....	Robert C. Stanger.....	854 C	Evan. & Ref.
Elmira College; Elmira, N. Y. (1855).....	J. Ralph Murray.....	1,263 F ⁶	Private
Elon College; Elon College, N. C. (1889).....	J. E. Danieley.....	1,163 C	Cong. Christ
Emerson College; Boston, Mass. (1880).....	S. J. McKinley.....	467 C	Private
Emmanuel College; Boston, Mass. (1919).....	Sister Alice Gertrude.....	863 F	Catholic ³
Emmanuel Missionary College; Berrien Springs, Mich. (1874).....	F. O. Rittenhouse.....	1,018 C	7th Day Adv
Emory & Henry College; Emory, Va. (1836).....	Earl G. Hunt, Jr.....	666 C	Methodist ³
Emory University; Atlanta & Oxford, Ga. (1836).....	S. Walter Martin.....	4,192 C	Methodist ³
Emporia, College of; Emporia, Kansas (1882).....	Robert McAdoo ⁶	300 C	Presbyterian
Erskine College; Due West, S. C. (1839).....	J. M. Lesesne.....	502 C	Presbyterian
Evansville College; Evansville, Ind. (1854).....	Melvin W. Hyde.....	3,077 C	Methodist ³
Fairfield University; Fairfield, Conn. (1942).....	James E. Fitzgerald.....	1,725 M ⁸	Catholic
Fairleigh Dickinson University; Rutherford, N. J. (1941) ⁴	Peter Sammartino.....	12,782 C	Private
Fairmont State College; Fairmont, W. Va. (1867).....	George R. Hunt ⁶	1,246 C	State
Farmington State Teachers College; Farmington, Maine (1864).....	Ermo Houston Scott.....	421 C	State
Fenn College; Cleveland, Ohio (1923).....	G. Brooks Earnest.....	6,465 C	Private
Ferris Institute; Big Rapids, Mich. (1884).....	Victor F. Spathelf.....	3,098 C	State
Finch College; New York, N. Y. (1900).....	Roland R. De Marco.....	270 F	Private
Fisk University; Nashville, Tenn. (1866).....	S. J. Wright.....	747 C	Private
Flora Macdonald College; Red Springs, N. C. (1896).....	C. G. Vardell, Jr. ⁵	411 C	Presbyterian
Florence State College; Florence, Ala. (1872).....	E. B. Norton.....	1,577 C	State
Florida, University of; Gainesville, Fla. (1853).....	J. Wayne Reitz.....	11,353 C	State
Florida A & M University; Tallahassee, Fla. (1887).....	George W. Gore, Jr.....	2,583 C	State
Florida Southern College; Lakeland, Fla. (1885).....	C. T. Thrift, Jr.....	2,272 C	Methodist
Florida State University; Tallahassee, Fla. (1851).....	R. M. Strozier.....	8,179 C ¹⁸	State
Fontbonne College; St. Louis, Mo. (1923).....	Sister M. Sheeley.....	608 F	Catholic ³
Fordham University; New York, N. Y. (1841).....	Rev. Laurence J. McGinley.....	8,855 C	Catholic ³
Fort Hays Kansas State College; Hays, Kans. (1902).....	M. C. Cunningham.....	2,657 C	State
Fort Valley State College; Fort Valley, Ga. (1895).....	Cornelius V. Troup.....	847 C	State
Franklin & Marshall College; Lancaster, Pa. (1787).....	F. D. Bolman, Jr.....	1,222 M	Ch. of Christ
Franklin College of Indiana; Franklin, Ind. (1834).....	H. W. Richardson.....	541 C	Baptist ³

and Universities

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
te College; Fresno & Bakersfield, Calif. (1911).....	Arnold E. Joyal.....	5,923 C	State
iversity; Wichita, Kans. (1898).....	Lowell E. Roberts.....	657 C	Quaker
iversity; Greenville, S. C. (1826).....	John L. Plyler.....	1,283 C	Baptist
College; Washington, D. C. (1864).....	Leonard M. Elstad.....	348 C	Private
lege; Erie, Pa. (1944).....	Rev. Wilfred J. Nash.....	1,600 M	Catholic ³
lege; Beaver Falls, Pa. (1848) ⁴	Edwin C. Clarke.....	792 C	Presbyterian
body College for Teachers; Nashville, Tenn. (1875).....	Henry H. Hill.....	1,619 C	Private
perdine College; Los Angeles, Calif. (1937).....	M. Norvel Young.....	1,037 C	Ch. of Christ ³
hington University; Washington, D. C. (1821).....	O. S. Colclough ⁵	7,536 C	Private
iams College; Chicago, Ill. (1890).....	John R. McCurdy.....	333 C	Private
College; Georgetown, Ky. (1798).....	Robert Lee Mills.....	1,142 C	Baptist ³
University; Washington, D. C. (1789).....	V. Rev. Edward B. Bunn.....	6,150 C	Catholic ³
iversity of; Athens, Ga. (1785).....	O. C. Aderhold.....	6,647 C ⁸	State
titute of Technology; Atlanta, Ga. (1885) ⁴	Edwin D. Harrison.....	5,137 C ⁸	State
thern College; Collegeboro, Ga. (1908).....	Z. S. Henderson.....	1,051 C	State
te College for Women; Milledgeville, Ga. (1889).....	Robert E. Lee.....	635 F ⁸	State
te College of Bus. Admin.; Atlanta, Ga. (1914).....	Noah N. Langdale, Jr.....	3,621 C ⁸	State
urt College; Lakewood, N. J. (1908) ⁴	Mother Marie Anna.....	405 F ⁸	Catholic ³
College; Gettysburg, Pa. (1832).....	Willard S. Paul.....	1,536 C	Lutheran ³
ate College; Glassboro, N. J. (1923).....	Thomas E. Robinson.....	2,881 C	State
ate College; Glenville, W. Va. (1872).....	Harry B. Heflin.....	660 C	State
College; San Francisco, Calif. (1901).....	Russell T. Sharpe.....	1,393 C	Private
iversity; Spokane, Wash. (1887).....	V. Rev. E. W. Morton.....	1,500 C	Catholic ³
el College; White Plains, N. Y. (1923).....	Mother Mary Dolores.....	416 F	Catholic ³
lege; Goshen, Ind. (1894).....	Paul E. Mininger.....	922 C	Mennonite
lege; Towson, Md. (1885).....	Otto F. Kraushaar.....	757 F	Private
College of; Great Falls, Mont. (1932).....	Rt. Rev. J. J. Donovan.....	682 C	Catholic ³
College; Greensboro, N. C. (1838).....	Harold H. Hutson.....	502 C	Methodist ³
College; Greenville, Ill. (1892).....	H. J. Long.....	622 C	Methodist ³
lege; Grinnell, Iowa (1846).....	Howard R. Bowen.....	980 C	Congregational ³
College; Grove City, Pa. (1884).....	J. Stanley Harker.....	1,428 C	Presbyterian ³
lege; Greensboro, N. C. (1837).....	Clyde A. Milner.....	1,139 C	Quaker ³
olphus College; St. Peter, Minn. (1862).....	Edgar M. Carlson.....	1,115 C	Lutheran
lege; Clinton, N. Y. (1812).....	Robert W. McEwen.....	692 M	Private
iversity; St. Paul, Minn. (1854).....	Paul H. Giddens.....	1,048 C	Methodist ³
dney College; Hampden-Sydney, Va. (1776).....	Joseph C. Robert.....	385 M	Presbyterian ³
titute; Hampton, Va. (1868).....	Jerome H. Holland.....	1,354 C	Private
lege; Hanover, Ind. (1827).....	John E. Horner.....	784 C	Presbyterian ³
mons University; Abilene, Tex. (1891).....	Evan Allard Reiff.....	1,531 C	Baptist
lege; Searcy, Ark. (1924).....	George S. Benson.....	998 C	Ch. of Christ ³
ge. See New York, State University of.....			
ers College; St. Louis, Mo. (1857).....	Glynn E. Clark.....	1,231 C	City
iversity of; Hartford, Conn. (1877).....	Vincent B. Coffin ¹⁵		Private
rt School; Hartford, Conn. (1877).....	Alan Tompkins ¹⁷	300 C	Private
ge of Music; Hartford & West Hartford, Conn. (1920).....	Moshe Paranov.....	288 C	Private
lege; Hartford, Conn. (1879).....	Alan S. Wilson.....	5,600 C	Private
lege; Oneonta, N. Y. (1928).....	F. M. Binder.....	580 C	Lutheran ³
iversity; Cambridge, Mass. (1636) ²²	Nathan M. Pusey.....	11,268 Co, C ¹⁶	Private
l College; Claremont, Calif. (1955).....	Joseph B. Platt.....	143 C	Private
lege; Hastings, Nebr. (1882).....	Theron B. Maxson.....	739 C	Presbyterian ³
lege; Haverford, Pa. (1833).....	Hugh Borton.....	455 M	Quaker ³
ersity of; Honolulu & Hilo, Hawaii (1907).....	Laurence H. Snyder.....	7,738 C	State
hers College; Brookline, Mass. (1921).....	Eisig Silberschlag ²¹	134 C	Private
College; Tiffin, Ohio (1850).....	Terry Wickham.....	890 C	Evan. & Ref. ³
ate Teachers College; Arkadelphia, Ark. (1929).....	D. D. McBrien.....	1,638 C	State
ge; Conway, Ark. (1884).....	Marshall T. Steel.....	565 C	Methodist
College; High Point, N. C. (1924).....	Wendell M. Patton.....	983 C	Methodist ³
lege; Hillsdale, Mich. (1844).....	J. D. Phillips.....	712 C	Baptist ³
ge. See Hartford, University of.....			
ge; Hiram, Ohio (1850).....	Paul F. Sharp.....	594 C	Disc. of Christ ³
ham Smith Colleges; Geneva, N. Y. (24) ¹⁴	Rev. L. M. Hirshson.....	942 Co	
ge; Hempstead, N. Y. (1935).....	John C. Adams.....	8,005 C	Private
ge; Hollins College, Va. (1842).....	John R. Everett.....	642 F ⁶	Private
College of the; Worcester, Mass. (1843).....	V. Rev. R. J. Swords.....	1,800 M	Catholic ³
College; Manitowoc, Wis. (1935).....	Sister M. Brideen.....	288 F	Catholic ³
College of the; Oakland & Los Gatos, Calif. (1868).....	Sister Imelda Maria.....	681 F ⁸	Catholic ³
College; Spokane, Wash. (1907).....	Sister Marian Raphael.....	259 F	Catholic ³
ge; Frederick, Md. (1893).....	Andrew G. Truxal.....	604 F	Un. Ch. of Christ ³
ge; Holland, Mich. (1851).....	Irwin J. Lubbers.....	1,385 C	Reformed
lege; Houghton, N. Y. (1883).....	S. W. Paine.....	744 C	Methodist
iversity of; Houston, Tex. (1934).....	Lt. Gen. A. D. Bruce ¹⁵	10,730 C	Private
ge; Birmingham, Ala. (1842).....	Leslie S. Wright.....	2,001 C	Baptist

Institution, location and (date founded)

Chief executive¹Students²

Control

Howard Payne College; Brownwood, Tex. (1889)	Guy D. Newman	1,023 C	Baptist
Howard University; Washington, D. C. (1867)	Mordecai W. Johnson	4,567 C	Private
Humboldt State College; Arcata, Calif. (1913)	C. Siemens	1,724 C	State
Hunter College. See New York, College of the City of			
Huntingdon College; Montgomery, Ala. (1854)	Hubert Searcy	660 C	Methodist
Huron College; Huron, S. Dak. (1883)	Daniel E. Kerr	435 C	Presbyterian
Huston-Tillotson College; Austin, Texas (1877)	J. J. Seabrook	403 C	Meth. & Cen.
Idaho; College of; Caldwell, Idaho (1891)	Tom E. Shearer	685 C	Presbyterian
Idaho, University of; Moscow, Idaho (1889)	D. R. Theophilus	3,674 C	State
Idaho State College; Pocatello, Idaho (1901)	Donald E. Walker	1,975 C	State
Illinois, University of; Urbana & Chicago, Ill. (1867)	David D. Henry	26,187 C	State
Illinois College; Jacksonville, Ill. (1829)	L. Vernon Caine	508 C	Presb. & C.
Illinois Institute of Technology; Chicago, Ill. (1892)	John T. Rettaliata	6,778 C	Private
Illinois State Normal University; Normal, Ill. (1857)	Robert G. Bone	3,581 C	State
Illinois Wesleyan University; Bloomington, Ill. (1850)	Lloyd M. Bertholf	1,132 C	Methodist
Immaculata College; Immaculata, Pa. (1920)	Sister Mary of Lourdes	630 F	Catholic
Immaculate Heart College; Los Angeles, Calif. (1916)	Sister Mary Humiliata	1,481 F ⁶	Catholic
Incarinate Word College; San Antonio, Tex. (1881)	S. T. Greenburg	1,077 F ⁶	Catholic
Indiana Central College; Indianapolis, Ind. (1902)	I. Lynd Esch	1,071 C	Evan. Un. B.
Indiana State College; Indiana, Pa. (1875) ¹¹	Willis E. Pratt	3,275 C	State
Indiana State Teachers College; Terre Haute, Ind. (1870)	Raleigh W. Holmstedt	3,834 C	State
Indiana University; Bloomington, Ind. (1820) ⁴	Herman B. Wells	23,378 C	State
Inter American University of Puerto Rico; San German, P. R. (1912) ⁴	Ronald C. Bauer	1,212 C	Presbyterian
Iona College; New Rochelle, N. Y. (1940)	Rev. Brother R. B. Power	2,000 M	Catholic
Iowa, University of; Iowa City, Iowa (1847)	V. M. Hancher	10,148 C	State
Iowa State Teachers College; Cedar Falls, Iowa (1876)	J. W. Maucker	3,425 C	State
Iowa State University of Science & Tech.; Ames, Iowa (1858)	James H. Hilton	8,808 C ⁸	State
Iowa Wesleyan College; Mt. Pleasant, Iowa (1842)	J. Raymond Chadwick	715 C	Methodist
Ithaca College; Ithaca, N. Y. (1892)	H. I. Dillingham	1,214 C	Private
Jackson College. See Tufts University			
Jacksonville State College; Jacksonville, Ala. (1883)	Houston Cole	2,096 C	State
Jamestown College; Jamestown, N. Dak. (1884)	John A. Fisher	552 C	Presbyterian
Jersey City State College; Jersey City, N. J. (1927)	M. B. Gilligan	1,948 C	State
Jewish Theological Seminary of America; New York, N. Y. (1887) ⁴	Louis Finkelstein ¹⁵	528 C	Jewish
John Carroll University; Cleveland, Ohio (1886)	V. Rev. H. E. Dunn	2,810 M ⁶	Catholic
John Hopkins University; Baltimore, Md. (1876)	Milton S. Eisenhower	5,285 M ⁶	Private
Johnson C. Smith University; Charlotte, N. C. (1867)	Rufus P. Perry	763 C	Presbyterian
Judson College; Marion, Ala. (1838)	J. I. Riddle	276 F	Baptist
Julliard School of Music; New York, N. Y. (1905)	William Schuman	656 C	Private
Juniata College; Huntington, Pa. (1876)	Calvert N. Ellis	708 C	Brethren
Kalamazoo College; Kalamazoo, Mich. (1833)	Weimer K. Hicks	640 C	American B.
Kansas, University of; Lawrence & Kansas City, Kans. (1865)	W. Clarke Wescoe ¹⁶	8,674 C	State
Kansas City, University of; Kansas City, Mo. (1933)	Richard M. Drake ¹⁵	2,308 C	Private
Kansas State College of Pittsburg; Pittsburg, Kans. (1903)	Leonard H. Axe	2,460 C	State
Kansas State Teachers College; Emporia, Kans. (1863)	John E. King	3,300 C	State
Kansas State University; Manhattan, Kans. (1863)	James A. McCain	6,367 C	State
Kansas Wesleyan University; Salina, Kans. (1866)	D. A. Zook	346 C	Methodist
Keene Teachers College; Keene, N. H. (1909)	Lloyd P. Young	759 C	State
Kent State University; Kent, Ohio (1910)	George A. Bowman	7,804 C ⁸	State
Kentucky, University of; Lexington, Ky. (1865) ⁴	Frank G. Dickey	9,022 C ¹⁶	State
Kentucky State College; Frankfort, Ky. (1886)	Rufus B. Atwood	611 C	State
Kentucky Wesleyan College; Owensboro, Ky. (1858)	Harold P. Hamilton	517 C	Methodist
Kenyon College; Gambier, Ohio (1824)	F. Edward Lund	552 M	Episcopal
Keuka College; Keuka Park, N. Y. (1890)	W. S. Litterick	359 F	Baptist
King College; Bristol, Tenn. (1867)	R. T. L. Liston	273 C	Presbyterian
King's College; Wilkes-Barre, Pa. (1946)	Rev. George P. Benaglia	1,006 M	Catholic
Knox College; Galesburg, Ill. (1837)	Shirley G. Umbeck	867 C	Private
Knoxville College; Knoxville, Tenn. (1875)	James A. Colston	585 C	Presbyterian
Kutztown State College; Kutztown, Pa. (1866) ¹¹	Italo deFrancesco	1,347 C	State
Lafayette College; Easton, Pa. (1826)	K. Roald Bergethon	1,449 M	Presbyterian
La Grange College; La Grange, Ga. (1831)	W. G. Henry, Jr.	440 C	Methodist
Lake Erie College; Painesville, Ohio (1856)	Paul Weaver	488 F	Private
Lake Forest College; Lake Forest, Ill. (1857)	William G. Cole	706 C	Presbyterian
Lamar State College of Technology; Beaumont, Tex. (1923)	F. L. McDonald	4,156 C	State
Lambuth College; Jackson, Tenn. (1843)	Luther L. Gobbel	517 C	Methodist
Lander College; Greenwood, S. C. (1872)	B. M. Grier	423 C	County-Private
Langston University; Langston, Okla. (1897)	G. Lamar Harrison	791 C	State
La Salle College; Philadelphia, Pa. (1863)	Brother D. Bernian	4,157 M	Catholic
La Sierra College; Arlington, Calif. (1922)	Norval F. Pease	825 C	7th Day Adv.
La Verne College; La Verne, Calif. (1891)	Harold D. Fasnacht	510 C	Brethren
Lawrence College; Appleton, Wis. (1847)	Douglas M. Knight	847 C	Methodist
Lebanon Valley College; Annville, Pa. (1866)	Frederic K. Miller	626 C	Evan. Un. Br.

and Universities

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
University; Bethlehem, Pa. (1865)	Martin D. Whitaker	3,413 M	Private
College; Syracuse, N. Y. (1946)	Rev. Robert F. Grewen	1,170 C	Catholic ³
ine College; Hickory, N. C. (1891)	Voigt R. Cromer	955 C	Lutheran
ge; Cambridge, Mass. (1909)	Don A. Orton	517 F ⁶	Private
Clark College; Portland, Oreg. (1867)	Morgan S. Odell	1,020 C	Presbyterian ³
College; Gaffney, S. C. (1845)	A. J. Eastwood	408 F	Private
morial University; Harrogate, Tenn. (1897)	Robert C. Provine	500 C	Private
iversity; Jefferson City, Mo. (1866)	Earl E. Dawson	1,353 C	State
iversity; Lincoln University, Pa. (1854)	A. O. Grubb ⁵	356 M ⁶	Private
d College; St. Charles, Mo. (1827)	F. L. McCluer	492 F ⁵	Presbyterian
lege; McMinnville, Oreg. (1849)	Harry L. Dillin	860 C	Baptist ³
University; Little Rock, Ark. (1927)	Carey V. Stabler	1,306 C	Private
State College; Livingston, Ala. (1835)	Delos Poe Culp	721 C	State
State College; Lock Haven, Pa. (1870) ¹¹	R. T. Parsons	887 C	State
University; Brooklyn, N. Y. (1926) ⁴	Adm. R. L. Conolly	4,405 C	Private
State College; Long Beach, Calif. (1949)	Carl W. McIntosh	9,117 C	State
College; Farmville, Va. (1884)	F. G. Lankford, Jr.	1,024 F ⁵	State
ge; Dubuque, Iowa (1839)	Rt. Rev. Msgr. D. V. Foley	1,300 M	Catholic
ights College; Loretto, Colo. (1918)	Sister Frances Marie	793 F	Catholic ³
s County Art Institute; Los Angeles, Calif. (1918)	Jarvis Barlow ¹⁷	77 C	County
St. Coll. of App. Arts & Sci.; Los Angeles, Calif. (1947)	Howard S. McDonald	13,841 C	State
College; Pineville, La. (1906)	G. Earl Guinn	884 C	Baptist
polytechnic Institute; Ruston, La. (1894)	Ralph L. Ropp	3,183 C	State
State University & A & M Coll.; Baton Rouge (1860) ⁴	Troy H. Middleton	10,914 C	State
University of; Louisville, Ky. (1798)	Philip Davidson	6,140 C	City
nological Institute; Lowell, Mass. (1895)	Martin J. Lydon	1,900 C	State
ge; Baltimore, Md. (1852)	Rev. V. F. Beatty	1,523 M ⁶	Catholic ³
ersity; Chicago, Ill. (1870)	V. Rev. J. F. Maguire	9,564 C	Catholic ⁴
ersity; New Orleans, La. (1912)	V. Rev. W. P. Donnelly	2,323 C	Catholic ³
ersity of Los Angeles; Los Angeles, Calif. (1911)	V. Rev. C. S. Casassa	1,791 M ⁶	Catholic ³
ge; Decorah, Iowa (1861)	J. W. Ylvisaker	1,189 C	Lutheran ³
College; Williamsport, Pa. (1812)	D. Frederick Wertz	835 C	Methodist
College; Lynchburg, Va. (1903)	Orville W. Wake	768 C	Disc. of Christ ³
College; St. Paul, Minn. (1853)	Harvey M. Rice	1,475 C	Presbyterian ³
College; Jacksonville, Ill. (1846)	Louis W. Norris	781 C	Methodist ³
ge; Harrisonburg, Va. (1908)	G. Tyler Miller	1,365 F ⁵	State
College; Livonia, Mich. (1947)	Sister Mary Assumpta	345 F	Catholic ³
ersity of; Orono & Portland, Maine (1865)	Lloyd H. Elliot	3,668 C	State
College; North Manchester, Ind. (1889)	A. Blair Helman	988 C ³	Brethren
College; New York, N. Y. (1853)	Brother A. Philip	2,894 M	Catholic ³
School of Music; New York, N. Y. (1917)	John Brownlee ¹⁷	622 C	Private
lle College of the Sacred Heart; Purchase, N. Y. (1841)	E. M. O'Byrne	741 F ⁵	Catholic ³
ate College; Mankato, Minn. (1869)	C. L. Crawford	5,059 C	State
ate College; Mansfield, Pa. (1857) ¹¹	Lewis W. Rathgeber	918 C	State
ge; Indianapolis & Oldenburg, Ind. (1937)	V. Rev. F. J. Reine	608 C	Catholic ³
ge; Marietta, Ohio (1797)	W. Bay Irvine	1,158 C	Congregational ³
iversity; Milwaukee, Wis. (1881)	V. Rev. E. J. O'Donnell	9,713 C	Catholic ³
ge; Huntington, W. Va. (1837)	Stewart H. Smith	3,674 C	State
n College; Staunton, Va. (1842)	Samuel R. Spencer, Jr.	365 F	Presbyterian
-Baylor College; Belton, Tex. (1845) ⁴	Arthur K. Tyson	660 F ⁵	Baptist
College; Toledo, Ohio (1922)	Sister John Baptist	875 F	Catholic
ington College; Fredericksburg, Va. (1908) ²⁵	Grellet C. Simpson ¹⁵	1,528 F	State
College; Davenport, Iowa (1939)	Mother Mary Geraldine	686 F	Catholic ³
College; Detroit, Mich. (1910)	Sister M. Honora	918 F	Catholic ³
eminary; Glen Ellyn, Ill. (1949)	V. Rev. G. M. Buckley ¹⁹	341 M	Catholic
teachers College; Maryknoll, N. Y. (1931)	Sister Jeanne Marie Lyons	156 F	Catholic ³
iversity of; College Park, Md. (1807) ⁴	Wilson H. Elkins	12,697 C	State
ate College; Princess Anne, Md. (1886)	John T. Williams	439 C	State
ate Teachers College; Frostburg, Md. (1898)	R. Bowen Hardesty	774 C	State
ate Teachers College; Salisbury, Md. (1925)	Wilbur Devilbiss	358 C	State
ate Teachers College; Towson, Md. (1866)	E. T. Hawkins	1,419 C	State
College; Marylhurst, Oreg. (1930)	Sister Miriam Barbara	495 F	Catholic ³
College; Salina, Kans. (1922)	Sister Etta L. Knaup	496 F	Catholic ³
College; Tarrytown & New York, N. Y. (1907)	Mother M. du Sacré Coeur	1,193 F	Catholic ³
ge; Maryville, Tenn. (1819)	Ralph Waldo Lloyd	1,304 C	Presbyterian ³
lege of the Sacred Heart; St. Louis, Mo. (1872)	Mother M. Erskine	236 F	Catholic ³
College; Scranton, Pa. (1915)	Sister M. Eugenia	1,203 F	Catholic ³
ts, University of; Amherst, Mass. (1863)	Shannon McCune ⁵	5,566 C	State
ts College of Art; Boston, Mass. (1873)	Robert L. Bertolli	474 C	State
ts Institute of Technology; Cambridge, Mass. (1861)	Julius A. Stratton	5,815 C	Private
ts State Teachers College; Bridgewater, Mass. (1840)	Clement C. Maxwell	1,065 C	State
ts State Teachers College; Fitchburg, Mass. (1894)	Ralph F. Weston	1,057 C	State

Institution, location and (date founded)

Chief executive¹Students²

Control

Massachusetts State Teachers College; Framingham, Mass. (1839)	Martin F. O'Connor.....	635 F	State
Massachusetts State Teachers College; Lowell, Mass. (1894).....	Daniel H. O'Leary.....	466 C	State
Massachusetts State Teachers College; North Adams, Mass. (1894)	Eugene L. Freely.....	284 C	State
Massachusetts State Teachers College; Salem, Mass. (1854).....	F. A. Meier.....	1,481 C	State
Massachusetts State Teachers College; Westfield, Mass. (1839)...	Edward J. Scanlon.....	476 C	State
Massachusetts State Teachers College; Worcester, Mass. (1871)...	Eugene A. Sullivan.....	735 C	State
McMurry College; Abilene, Tex. (1923).....	Gordon R. Bennett.....	946 C	Methodist
McNeese State College; Lake Charles, La. (1939).....	W. N. Cusic.....	2,328 C	State
McPherson College; McPherson, Kans. (1887).....	D. W. Bittinger.....	524 C	Brethren
Medical Evangelists, Coll. of; Loma Linda & Los Angeles, Calif. (1905)	Godfrey T. Anderson.....	803 C	7th Day A
Memphis State University; Memphis, Tenn. (1909).....	C. C. Humphreys ⁵	4,505 C	State
Mercer University; Macon, Ga. (1833).....	Rufus C. Harris.....	1,540 C	Baptist ²
Mercy College; Detroit, Mich. (1941).....	Sister Mary Lucille.....	572 F ⁶	Catholic ³
Mercyhurst College; Erie, Pa. (1926).....	Mother M. Eustace.....	553 F	Catholic ³
Meredith College; Raleigh, N. C. (1891).....	Carlyle Campbell.....	634 F	Baptist
Merrimack College; North Andover, Mass. (1947).....	Rev. Vincent A. McQuade	1,512 C	Catholic
Miami, University of; Coral Gables, Fla. (1925).....	Jay F. W. Pearson.....	12,843 C	Private
Miami University; Oxford, Ohio (1809) ⁴	John D. Millett.....	9,965 C	State
Michigan, University of; Ann Arbor, Mich. (1817) ⁴	Harlan Hatcher.....	23,914 C	State
Michigan College of Mining & Technology; Houghton, Mich. (1885) ⁴	J. R. Van Pelt.....	2,789 C ⁸	State
Michigan State University; E. Lansing & Rochester, Mich. (1855)	John A. Hannah.....	19,712 C ¹⁸	State
Middle Tennessee State College; Murfreesboro, Tenn. (1911).....	Quill E. Cope.....	2,161 C	State
Middlebury College; Middlebury, Vt. (1800).....	Samuel S. Stratton.....	1,254 C	Private
Midland College; Fremont, Nebr. (1887).....	Paul W. Dieckman.....	488 C	Lutheran ²
Midwestern University; Wichita Falls, Tex. (1922).....	Travis A. White.....	1,382 C	State
Millersville State College; Millersville, Pa. (1855) ¹¹	D. L. Biemesderfer.....	1,499 C	State
Millikin University; Decatur, Ill. (1901).....	Paul L. McKay.....	1,064 C	Presbyterian
Mills College; Oakland, Calif. (1852).....	C. Easton Rothwell.....	707 F ⁶	Private
Mills College of Education; New York, N. Y. (1909).....	Amy Hostler.....	190 F	Private
Millsaps College; Jackson, Miss. (1892).....	H. E. Finger, Jr.....	844 C	Methodist ¹
Milwaukee-Downer College; Milwaukee, Wis. (1851).....	John B. Johnson, Jr.....	169 F	Private
Minnesota, University of; Minneapolis, Minn. (1851) ⁴	O. Meredith Wilson.....	26,538 C ¹⁸	State
Misericordia, College; Dallas, Pa. (1924).....	Sister M. C. McHale.....	1,171 F	Catholic ³
Mississippi, University of; Jackson, Miss. (1848).....	John D. Williams ¹⁵	4,440 C	State
Mississippi College; Clinton, Miss. (1826).....	R. A. McLemore.....	1,596 C	Baptist
Mississippi Southern College; Hattiesburg, Miss. (1910).....	William D. McCain.....	4,004 C	State
Mississippi State College for Women; Columbus, Miss. (1884)...	C. P. Hogarth.....	1,286 F	State
Mississippi State University; Starkville, Miss. (1878).....	Ben F. Hilbun.....	4,272 C	State
Missouri, University of; Columbia & Rolla, Mo. (1839).....	Elmer Ellis.....	12,203 C	State
Missouri Valley College; Marshall, Mo. (1888).....	M. Earle Collins.....	490 C	Presbyterian
Monmouth College; Monmouth, Ill. (1853).....	R. W. Gibson.....	647 C	Presbyterian
Monmouth College; West Long Branch, N. J. (1933).....	Edward G. Schlaefer.....	1,946 C	Private
Montana School of Mines; Butte, Mont. (1893).....	Edwin G. Koch.....	269 C	State
Montana State College; Bozeman, Mont. (1893).....	Roland R. Renne.....	3,792 C	State
Montana State University; Missoula, Mont. (1893).....	H. K. Newburn.....	3,415 C ⁸	State
Montclair State College; Upper Montclair, N. J. (1908).....	E. D. Partridge.....	2,427 C	State
Moore Institute of Art; Philadelphia, Pa. (1844).....	Harold R. Rice.....	286 F	Private
Moorhead State College; Moorhead, Minn. (1887).....	John J. Neumaier.....	1,197 C	State
Moravian College; Bethlehem, Pa. (1742).....	R. S. Hauptert.....	773 C	Moravian
Morehead State College; Morehead, Ky. (1922).....	Adron Doran.....	2,058 C	State
Morehouse College. See Atlanta University System.....			
Morgan State College; Baltimore, Md. (1867).....	Martin D. Jenkins.....	2,253 C	State
Morningside College; Sioux City, Iowa (1894).....	J. Richard Palmer.....	929 C	Methodist ¹⁸
Morris Brown College; Atlanta, Ga. (1881) ¹⁴	John H. Lewis.....	820 C	Episcopal
Morris Harvey College; Charleston, West Va. (1888).....	L. Riggleman.....	2,035 C	Private
Mount Angel College; Mount Angel, Ore. (1887).....	Mother. M. G. Piennett.....	171 C	Catholic ³
Mount Angel Seminary; St. Benedict, Ore. (1889).....	Rt. Rev. Damian Jentges	131 M	Catholic
Mount Holyoke College; South Hadley, Mass. (1837).....	Richard Glenn Gettell.....	1,442 F	Private
Mount Mary College; Milwaukee, Wis. (1913) ⁴	Sister M. John Francis.....	1,085 F	Catholic ³
Mount Mercy College; Cedar Rapids, Iowa (1928).....	Sister Mary Ildephonse.....	290 F	Catholic ³
Mount Mercy College; Pittsburgh, Pa. (1929).....	Sister M. Muriel ⁶	525 F	Catholic ³
Mount St. Agnes College; Mount Washington, Md. (1890).....	Sister M. Cleophas.....	310 F	Catholic ³
Mount St. Joseph, College of; Mt. St. Joseph, Ohio (1854).....	Sister Maria Corona.....	721 F	Catholic ³
Mount St. Joseph Teachers College; Buffalo, N. Y. (1937).....	Sister M. Hubert.....	402 F	Catholic ³
Mount Saint Mary College; Hooksett, N. H. (1934).....	Sister M. Mauritia.....	198 F	Catholic ³
Mount St. Mary's College; Emmitsburg, Md. (1808).....	Rt. Rev. J. L. Sheridan.....	660 M	Catholic
Mount St. Mary's College; Los Angeles, Calif. (1925).....	Sister Rose Gertrude.....	1,013 F ⁶	Catholic ³
Mount St. Scholastica College; Atchison, Kans. (1924).....	Mother Alfred Schroll.....	544 F ⁶	Catholic ³
Mount St. Vincent, College of; New York, N. Y. (1847).....	Sister Catharine Marie.....	576 F	Catholic ³
Mount Union College; Alliance, Ohio (1846).....	Carl C. Bracy.....	900 C	Methodist ¹
Muhlenberg College; Allentown, Pa. (1848).....	J. Conrad Seegers.....	1,330 C	Lutheran ²
Mundelein College; Chicago, Ill. (1930).....	Sister Mary Ann Ida.....	1,023 F	Catholic ³

and Universities

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
ate College; Murray, Ky. (1922)	R. H. Woods	2,520 C	State
n College; New Concord, Ohio (1837)	R. N. Montgomery	1,137 C	Presbyterian ³
College of Education; Evanston, Ill. (1886)	K. Richard Johnson	750 C	Private
College; Kalamazoo, Mich. (1924)	Sister Marie Kathleen	283 F	Catholic ³
College; Louisville, Ky. (1920)	Sister Margaret Gertrude	1,224 F ³	Catholic ³
College of Rochester; Rochester, N. Y. (1924)	Mother M. Helene	777 F	Catholic ³
University of; Lincoln & Omaha, Nebr. (1869)	Clifford M. Hardin ¹⁵	7,428 C	State
State Teachers College; Chadron, Nebr. (1911)	Barton L. Kline	701 C	State
State Teachers College; Kearney, Nebr. (1905)	Herbert L. Cushing	2,096 C	State
State Teachers College; Peru, Nebr. (1867)	Neal S. Gomon	813 C	State
State Teachers College; Wayne, Nebr. (1910)	W. A. Brandenburg	1,262 C	State
Wesleyan University; Lincoln, Nebr. (1887)	Vance D. Rogers	997 C	Methodist
University of; Reno & Las Vegas, Nev. (1874)	Charles J. Armstrong	2,477 C	State
Academy of the; Bryn Athyn, Pa. (1877)	Rt. Rev. W. D. Pendleton	73 C	Swedenborgian ³
id Conservatory of Music; Boston, Mass. (1867)	James Aliferis	381 C	Private
shire, University of; Durham, N. H. (1866)	Eldon L. Johnson	3,259 C	State
College; New Haven, Conn. (1920)	Marvin K. Peterson	1,086 C	Private
State Teachers College. See Southern Conn. St. Col.			
p, University of; Albuquerque, N. Mex. (1889)	Tom L. Popejoy	5,695 C	State
p Highlands University; Las Vegas, N. Mex. (1893)	Thomas C. Donnelly	1,134 C	State
p Institute of Mining & Tech.; Socorro, N. Mex. (1889)	E. J. Workman	295 C	State
p State University; University Park, N. Mex. (1889) ⁴	R. B. Corbett	3,866 C	State
p Western College; Silver City, N. Mex. (1893)	J. Cloyd Miller	644 C	State
le, College of; New Rochelle, N. Y. (1904)	Mother Mary Peter Carthy	936 F	Catholic ³
College of the City of:			
College; Brooklyn, N. Y. (1930)	Harry D. Gideonse	11,658 C	City
ge; New York, N. Y. (1847)	B. G. Gallagher	21,545 C	City
College; New York, N. Y. (1870)	John J. Meng ⁵	9,132 C	City
College; Flushing, N. Y. (1937)	Harold W. Stoke	6,268 C	City
State University of; Albany, N. Y. (1948)	Thomas H. Hamilton	27,453 C	State
ts: Harpur College; Endicott, N. Y. (1946)	Glenn G. Bartle	926 C	State
Colleges: Brooklyn, N. Y. (1857)	Robert A. Moore	585 C	State
e, N. Y. (1834)	Carlyle Jacobsen	331 C	State
f Education: Albany, N. Y. (1844)	Evan R. Collins	2,772 C	State
ort, N. Y. (1841)	Donald M. Tower	1,557 C	State
, N. Y. (1869)	Paul G. Bulger	3,609 C	State
, N. Y. (1863)	Donovan C. Moffett ⁶	2,338 C	State
a, N. Y. (1867)	Harry W. Porter	1,048 C	State
p, N. Y. (1867)	Francis J. Moench	1,393 C	State
tz, N. Y. (1886)	William J. Haggerty	1,490 C	State
, N. Y. (1887)	Royal F. Netzer	1,583 C	State
, N. Y. (1861)	Foster S. Brown	2,333 C	State
argh, N. Y. (1889)	George W. Angell	1,308 C	State
a, N. Y. (1889)	Frederick W. Crumb	1,167 C	State
essional Colleges: College on L. I., Oyster Bay (1957)	Leonard K. Olsen ²¹	352 C	State
of Forestry at Syracuse U.; Syracuse, N. Y. (1911)	Hardy L. Shirley ²¹	628 M ³	State
College at Ft. Schuyler; New York, N. Y. (1874)	Vice Adm. H. C. Moore	513 M	State
of Ceramics at Alfred U.; Alfred, N. Y. (1900)	John F. McMahon ²¹	383 C	State
of Agriculture at Cornell U.; Ithaca, N. Y. (1904)	Charles E. Palm ²¹	1,836 C	State
of Home Econ. at Cornell U.; Ithaca, N. Y. (1900)	Helen G. Canoyer ²¹	746 F ³	State
of Ind. & Labor Rel., Cornell U.; Ithaca, N. Y. (1945)	John W. McConnell ²¹	303 C	State
ry College at Cornell U.; Ithaca, N. Y. (1894)	George C. Poppensiek ²¹	252 C	State
iversity; New York, N. Y. (1831)	Carroll V. Newson	31,502 C	Private
ge of Engineering; Newark, N. J. (1881)	Robert W. Van Houten	3,431 C	State & City
College; Newberry, S. C. (1856)	Conrad B. Park ⁵	621 C	Lutheran
College; New Orleans; La. (1886) ²⁶	John R. Hubbard ²¹	885 F	Private
ge of the Sacred Heart; Newton, Mass. (1946)	Mother G. Husson	525 F	Catholic ³
iversity; Niagara Falls, N. Y. (1856)	V. Rev. V. T. Swords	608 C	Catholic
a, Agr. & Tech. College of; Greensboro, N. C. (1891)	Warmoth T. Gibbs	2,217 C	State
a, University of:			
ed Office; Chapel Hill, N. C. (1931)	William C. Friday	15,792 C	State
rolina State College; Raleigh, N. C. (1887)	John T. Caldwell ¹⁵	5,589 C	State
y of N. C. at Chapel Hill; Chapel Hill, N. C. (1789)	William B. Aycock ¹⁵	7,557 C	State
College; Greensboro, N. C. (1892)	Gordon W. Blackwell ¹⁵	2,646 F	State
a College at Durham; Durham, N. C. (1910)	A. Elder	1,884 C	State
College; Naperville, Ill. (1861)	C. Harve Geiger	809 C	Evan. Un. Breth. ³
, University of; Grand Forks, N. Dak. (1883)	George W. Starcher	3,708 C	State
Agricultural College; Fargo, N. Dak. (1889)	Fred Samuel Hultz	3,340 C	State
State Teachers College; Dickinson, N. Dak. (1917)	Charles E. Scott	538 C ¹⁴	State
State Teachers College; Minot, N. Dak. (1913)	C. P. Lura	1,403 C	State
State Teachers College; Valley City, N. Dak. (1890)	R. L. Lokken	795 C	State
College; Dahlonega, Ga. (1873)	Merritt E. Hoag	722 C	State

Institution, location and (date founded)

Chief executive¹Students²

Control

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
North Texas State College; Denton, Tex. (1890).....	J. C. Matthews.....	7,035 C	State
Northeast Louisiana State College; Monroe, La. (1931).....	George T. Walker.....	2,190 C	State
Northeast Missouri State Teachers College; Kirksville, Mo. (1867).....	Walter H. Ryle.....	2,521 C	State
Northeastern State College; Tahlequah, Okla. (1909).....	Harrell E. Garrison.....	2,323 C	State
Northeastern University; Boston, Mass. (1898).....	Asa S. Knowles.....	18,790 C	Private
Northern Baptist Theological Seminary; Chicago, Ill. (1913).....	C. W. Koller.....	226 C ⁸	Baptist ³
Northern Illinois University; De Kalb & Oregon, Ill. (1895).....	Leslie A. Holmes.....	5,704 C	State
Northern Michigan College; Marquette, Mich. (1899).....	Edgar L. Harden.....	1,663 C	State
Northern Montana College; Havre, Mont. (1929).....	L. O. Brockmann.....	668 C ⁸	State
Northern State Teachers College; Aberdeen, S. Dak. (1901).....	J. Howard Kramer.....	1,241 C	State
Northland College; Ashland, Wis. (1892).....	Gus Turbeville.....	334 C	Congregati.
Northwest Missouri State College; Maryville, Mo. (1905).....	J. W. Jones.....	1,725 C	State
Northwest Nazarene College; Nampa, Idaho (1913).....	John Riley.....	577 C	Nazarene
Northwestern State College, Alva, Okla. (1897).....	Jesse W. Martin.....	1,004 C	State
Northwestern State College; Natchitoches, La. (1884).....	John S. Kyser.....	2,650 C	State
Northwestern University; Evanston & Chicago, Ill. (1851).....	J. Roscoe Miller.....	14,240 C ⁸	Private
Norwich University; Northfield, Vt. (1819).....	Ernest N. Harmon.....	885 M	Private
Notre Dame, College of; Belmont, Calif. (1868).....	Sister Catharine Julie.....	267 F	Catholic ⁴
Notre Dame, University of; Notre Dame, Ind. (1842).....	Rev. T. M. Hesburgh.....	6,178 M ⁴	Catholic ⁴
Notre Dame College; Cleveland, Ohio (1922).....	Sister Mary Loyole.....	340 F	Catholic ⁴
Notre Dame College of Staten Island; Staten Island, N.Y. (1931).....	Mother St. Egbert.....	350 F	Catholic ⁴
Notre Dame of Maryland, College of; Baltimore, Md. (1873).....	Sister Margaret Mary.....	875 F ⁶	Catholic ⁴
Notre Dame Seminary; New Orleans, La. (1923).....	Rev. John McQuade.....	97 M ¹⁴	Catholic
Oakwood College; Huntsville, Ala. (1896).....	Garland J. Millet.....	284 C	7th Day Adv.
Oberlin College; Oberlin, Ohio (1833).....	R. K. Carr.....	2,271 C	Private
Occidental College; Los Angeles, Calif. (1887).....	Arthur G. Coons.....	1,347 C	Presbyterian
Oglethorpe University; Atlanta, Ga. (1835).....	Donald C. Agnew.....	286 C ⁸	Private
Ohio Northern University; Ada, Ohio (1871).....	F. B. McIntosh.....	1,725 C	Methodist ³
Ohio State University; Columbus, Ohio (1870) ⁴	Novice G. Fawcett.....	21,528 C ⁸	State
Ohio University; Athens, Ohio (1804) ⁴	John C. Baker.....	7,768 C	State
Ohio Wesleyan University; Delaware, Ohio (1842).....	D. A. Lockmiller.....	1,989 C	Methodist ³
Oklahoma, University of; Norman, Okla. (1892) ⁴	G. L. Cross.....	10,244 C	State
Oklahoma Baptist University; Shawnee, Okla. (1910).....	John W. Raley.....	1,299 C	Baptist
Oklahoma City University; Oklahoma City, Okla. (1904).....	Jack Stauffer Wilkes.....	2,170 C	Methodist ³
Oklahoma College for Women; Chickasha, Okla. (1908).....	Freeman H. Beets.....	858 F	State
Oklahoma State Univ. of Agr. & App. Sci.; Stillwater (1891) ⁴	Oliver S. Willham.....	9,566 C	State
Olivet Nazarene College; Bourbonnais, Ill. (1907).....	Harold W. Reed.....	888 C	Nazarene
Omaha, Municipal University of; Omaha, Nebr. (1908).....	Milo Bail.....	5,139 C	City
Oregon, University of; Eugene, Oreg. (1876) ⁴		5,950	State
Oregon College of Education; Monmouth, Oreg. (1882).....	R. E. Lieuellen.....	922 C	State
Oregon State College; Corvallis, Oreg. (1868).....	A. L. Strand.....	7,445 C ⁸	State
Ottawa University; Ottawa, Kans. (1865).....	Andrew B. Martin.....	520 C	Baptist ³
Otterbein College; Westerville, Ohio (1847).....	Lynn W. Turner.....	852 C	Brethren ⁴
Quachita Baptist College; Arkadelphia, Ark. (1886).....	Ralph A. Phelps.....	1,006 C	Baptist
Our Lady of Cincinnati College; Cincinnati, Ohio (1935).....	Sister M. Grace Grace.....	919 F	Catholic ⁴
Our Lady of the Elms; Chicopee, Mass. (1928).....	Sister Rose William.....	505 F ⁶	Catholic ⁴
Our Lady of the Lake College; San Antonio, Tex. (1896).....	John L. McMahon.....	623 F ⁶	Catholic ⁴
Ozarks, College of the; Clarksville, Ark. (1834).....	Milton W. Brown ⁶	277 C	Presbyterian
Pace College; New York; N. Y. (1906).....	Robert S. Pace.....	3,522 C	Private
Pacific, College of the; Stockton & Dillon Beach, Calif. (1851).....	Robert E. Burns.....	2,020 C	Methodist ³
Pacific Lutheran College; Tacoma, Wash. (1890).....	Seth C. Eastvold.....	1,605 C	Lutheran
Pacific Oaks Friends School; Pasadena, Calif. (1945).....	Evangeline Burgess.....	37 C	Private
Pacific Union College; Angwin & Albion, Calif. (1882).....	R. W. Fowler.....	862 C	7th Day Adv.
Pacific University; Forest Grove, Oreg. (1842).....	Miller Ritchie.....	713 C	Congregational
Pan American College; Edinburg, Tex. (1927).....	H. A. Hodges ⁸	1,800 C	County & St.
Panhandle A & M College; Goodwell, Okla. (1909).....	Marvin McKee.....	924	State
Park College; Parkville, Mo. (1875).....	Paul Hampton Morrill.....	305 C	Presbyterian
Parsons College; Fairfield, Iowa (1875).....	Millard G. Roberts.....	976 C	Presbyterian
Pasadena College; Pasadena, Calif. (1902).....	Russell V. DeLong.....	853 C	Nazarene
Peabody Institute; Baltimore, Md. (1857).....	John R. Montgomery.....	380 C	Private
Pembroke College; Providence, R. I. (1891) ¹³	Nancy Duke Lewis ²¹	873 F	Private
Pembroke State College; Pembroke, N. C. (1887).....	Dr. Walter J. Gale.....	505 C	State
Pennsylvania, University of; Philadelphia, Pa. (1740).....	Gaylord P. Harnwell.....	12,224 C	Private
Pennsylvania Military College; Chester, Pa. (1821).....	Clarence R. Moll.....	859 M	Private
Pennsylvania State College of Optometry; Philadelphia, Pa. (1919).....	Albert Fitch.....	123 C	Private
Pennsylvania State Teachers College. See individual colleges.....			
Pennsylvania State University; University Park, Pa. (1855) ⁴	Eric A. Walker.....	18,773 C	State
Pfeiffer College; Misenheimer, N. C. (1885).....	J. Lem Stokes, II.....	656 C	Methodist ³
Philadelphia Museum College of Art; Philadelphia, Pa. (1876).....	E. M. Benson.....	657 C	Private
Philadelphia Textile Institute; Philadelphia, Pa. (1884).....	B. W. Hayward.....	351 C	Private
Philander Smith College; Little Rock, Ark. (1868).....	M. LaFayette Harris.....	732 C	Methodist
Phillips University; Enid, Okla. (1906).....	Eugene S. Briggs.....	1,063 C	Disc. of Chr.

and Universities

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
College; Pikeville, Ky. (1889)	A. A. Page	713 C	Presbyterian
University of; Pittsburgh & Johnstown, Pa. (1787)	Edward H. Litchfield ¹⁵	11,070 C ³	Private
Teachers College; Plymouth, N. H. (1870)	Harold E. Hyde	714 C	State
College; Claremont, Calif. (1887)	E. Wilson Lyon	1,072 C	Private
University of; Portland, Oreg. (1901)	Rev. Howard J. Kenna	1,452 C	Catholic ³
State College; Portland, Oreg. (1955)	Branford P. Millar	3,649 C	State
University A & M College; Prairie View, Tex. (1876)	E. B. Evans	2,400 C	State
College; Brooklyn, N. Y. (1887)	Robert F. Oxnam	4,353 C	Private
College; Clinton, S. C. (1880)	M. W. Brown	492 C	Presbyterian
College; School of Christian Education; Richmond, Va. (1914)	Charles E. S. Kraemer	116 C	Presbyterian
University; Princeton, N. J. (1746)	Robert F. Goheen	3,780 M	Private
College; Elmhurst, Ill. (1898)	William E. Morgan	500 C	Christ. Sci.
College; Providence, R. I. (1917)	V. Rev. W. D. Marrin	2,000 M	Catholic
University of; Rio Piedras, P. R. (1903) ⁴	Jaime Benítez ¹⁵	18,223 C	State
University of; Tacoma, Wash. (1888)	R. F. Thompson	2,318 C	Methodist ³
University; Lafayette, Ind. (1869) ⁴	Frederick L. Hovde	13,136 C	State
College; Charlotte, N. C. (1857)	Edwin R. Walker	713 F ³	Presbyterian ³
College (NYC). See New York, College of the City of			
College; Quincy, Ill. (1860)	Rev. Julian Woods	747 C	Catholic ³
College; Hamden, Conn. (1929)	Nils G. Sahlin	1,001 C	Private
College; Cambridge, Mass. (1879) ²³	Mary I. Bunting	1,671 F	Private
College; Radford, Va. (1910) ²⁷	Charles K. Martin	1,228 F ²⁷	State
College; Ashland, Va. (1830)	J. E. Moreland	566 M ⁶	Methodist ³
College; Woman's College, Lynchburg, Va. (1891)	W. F. Quillian, Jr.	670 F	Methodist ³
University of; Redlands, Calif. (1907)	George H. Armacost	1,506 C	Baptist ³
College; Portland, Oreg. (1909)	Richard H. Sullivan	688 C	Private
College; Denver, Colo. (1887)	Rev. R. F. Ryan	956 M ⁴	Catholic ³
College; Weston, Mass. (1927)	Sister Mary Alice	678 F	Catholic ³
College; Polytechnic Institute; Troy, N. Y. (1824) ^{4, 14}	Richard G. Folsom	4,447 M ³	Private
College; University of; Kingston, R. I. (1892)	Francis H. Horn	2,852 C	State
College; Providence, R. I. (1854)	William Gaige	2,047 C	State
College; School of Design; Providence, R. I. (1877)	John R. Frazer	786 C	Private
College; Houston, Tex. (1891)	W. V. Houston	1,986 C	Private
University of; Richmond, Va. (1830)	George M. Modlin	2,682 Co	Baptist ³
College; Trenton, N. J. (1865)	Franklin F. Moore	2,767 C	Private
College; Ripon, Wis. (1851)	Fred O. Pinkham	600 C	Private
College; Nashua, N. H. (1933)	Sister Clarice de St. Marie	277 F ⁶	Catholic ³
College; Salem, Va. (1842)	H. Sherman Oberly	664 C	Lutheran ³
University of; Rochester, N. Y. (1850)	Cornelis W. de Kiewit	3,999 C	Private
College; Institute of Technology; Rochester, N. Y. (1829)	Mark Ellingson	2,065 C	Private
College; Rockford, Ill. (1847)	John Howard	418 C	Private
College; Kansas City, Mo. (1910)	V. Rev. M. E. Van Ackeren	1,360 M ⁶	Catholic ³
College; Billings, Mont. (1883)	P. M. Widenhouse	237 C	Protestant ³
College; Winter Park, Fla. (1885)	Hugh F. McKean	797 C ³	Private
University; Chicago, Ill. (1945)	Edward J. Sparling	4,583 C	Private
College; River Forest, Ill. (1848) ⁴	Sister M. Aurelia	815 F ⁶	Catholic ³
College; Buffalo, N. Y. (1948)	Sister M. A. Canavan	636 F	Catholic ³
College; Catholic Institute; Terre Haute, Ind. (1874)	Ralph A. Morgen	365 M	Private
College; Rosemont, Pa. (1922)	Mother Mary Aidan	560 F	Catholic ³
College; Troy & Albany, N. Y. (1916)	Lewis A. Froman	2,357 F ⁶	Private
College; State University; New Brunswick, N. J. (1766) ²²	Mason W. Gross	15,266 C, Co	State
College; State College; Sacramento, Calif. (1947)	Guy A. West	4,715 C	State
College of the; Santurce, P. R. (1935)	Mother R. A. Arsuaga	206 F	Catholic ³
College; Dominican College; Houston, Tex. (1946)	Sister M. Antoinette	452 F	Catholic ³
College; Davenport, Iowa (1882)	Rt. Rev. William J. Collins	1,284 M ⁶	Catholic
College; Manchester, N. H. (1889)	Rev. G. F. McCarthy	988 M ⁶	Catholic ³
College; Raleigh, N. C. (1867)	James A. Boyer	477 C	Episcopal
College of; St. Joseph, Minn. (1913)	Sister R. Westkaemper	497 F	Catholic ³
College; Atchison, Kans. (1858)	Rev. Brendan Downey	558 M	Catholic ³
College; St. Bernard, Ala. (1892)	V. Rev. Brian J. Egan	577 C	Catholic ³
College of Siena College; Loudonville, N. Y. (1937)	Rev. E. F. Christy	1,782 M ⁶	Catholic ³
College; University; St. Bonaventure, N. Y. (1856)	V. Rev. Brian G. Lhota	1,602 C	Catholic
College of; St. Paul, Minn. (1905)	Sister Mary William	1,117 F	Catholic ³
College; St. Cloud, Minn. (1869)	George F. Budd	2,779 C	State
Seminary; Kenmore, Wash. (1931)	Michael J. O'Neill ²⁸	182 M	Catholic
University; Austin, Tex. (1885)	Brother Raymond Fleck	420 M	Catholic
College of; Convent Station, N. J. (1899)	Sister Hildegard Marie	895 F	Catholic ³
College of; Joliet, Ill. (1920)	Sister Mary Elvira	525 F	Catholic ³
College; Brooklyn, N. Y. (1858)	V. Rev. Brother Urban	1,124 M ⁶	Catholic ³
College; Fort Wayne, Ind. (1890)	Sister M. Rosanna	371 F ⁹	Catholic ³
College; Loretto, Pa. (1847)	Rev. C. J. Devlin	970 C	Catholic ³
College of Cleveland; Cleveland, Ohio (1928)	Rt. Rev. R. B. Navin	995 F	Catholic

Institution, location and (date founded)

Chief executive¹Students²

Control

St. John Fisher College; Rochester, N. Y. (1951).....	V. Rev. C. J. Lavery.....	438 M	Catholic
St. John's College; Annapolis, Md. (1696).....	Richard D. Weigle.....	227 C	Private
St. John's College; Camarillo & San Fernando, Calif. (1926).....	V. Rev. W. J. Kenneally..	269 M	Catholic
St. John's University; Collegeville, Minn. (1857).....	Rt. Rev. B. Dworschak ¹⁵ ..	1,179 M	Catholic
St. John's University; Jamaica & Brooklyn, N. Y. (1870).....	V. Rev. John A. Flynn....	9,217 C	Catholic
St. Joseph College; Emmitsburg, Md. (1899).....	Sister Hilda Gleason....	411 F	Catholic
St. Joseph College; West Hartford, Conn. (1932).....	Sister M. Theodore.....	615 F ⁶	Catholic
St. Joseph's College; Philadelphia, Pa. (1851).....	V. Rev. J. Joseph Bluett..	3,475 M ⁶	Catholic
Saint Joseph's College; Rensselaer, Ind. (1889) ⁴	Raphael H. Gross.....	1,793 C	Catholic
St. Joseph's College for Women; Brooklyn, N. Y. (1916).....	Sister Vincent Therese... V. Rev. E. V. Casserly...	546 F 14 M	Catholic
St. Joseph's Seminary of Wash., D. C.; Washington, D. C. (1888).....	Eugene G. Bewkes.....	1,320 C	Private
St. Lawrence University; Canton, N. Y. (1856).....	V. Rev. P. C. Reinert....	7,152 C	Catholic
St. Louis University; St. Louis, Mo. (1818) ⁴	Rt. Rev. R. Heider ¹⁵	322 M	Catholic
St. Martin's College; Olympia, Wash. (1895).....	Sister Mary Alice.....	526 F	Catholic
St. Mary, College of; Omaha, Neb. (1923).....	Arthur M. Murphy.....	452 F ⁶	Catholic
St. Mary College; Xavier, Kans. (1923).....	Sister M. Angelita.....	344 F	Catholic
St. Mary of the Springs, College of; Columbus, Ohio (1911).....	Sister M. Hildegardis... Sister Francis Joseph...	71 F ⁶ 523 F	Catholic
St. Mary-of-the-Watch, College of; Salt Lake City, Utah (1926) ¹⁴	Sister M. Madeleva.....	1,022 F	Catholic
St. Mary-of-the-Woods Coll.; St. Mary-of-the-Woods, Ind. (1840).....	Brother I. Basil.....	814 M	Catholic
Saint Mary's College; Notre Dame, Ind. (1844).....	Rev. Brother S. Albert....	730 M	Catholic
St. Mary's College; Winona, Minn. (1913).....	Sister Mary Louise.....	407 F	Catholic
St. Mary's College of Calif.; St. Mary's College, Calif. (1863).....	Lloyd P. McDonald.....	750 M	Catholic
St. Mary's Dominican College; New Orleans, La. (1910).....	Rev. W. J. Buehler.....	1,941 M	Catholic
St. Mary's Seminary & University; Baltimore, Md. (1791) ⁴	V. Rev. Gerald E. Dupont..	806 M	Catholic
St. Mary's University; San Antonio, Tex. (1852).....	Rev. D. M. Burke.....	1,058 C	Catholic
St. Michael's College; Winooski, Vt. (1904).....	C. M. Granskou.....	1,752 C	Lutheran
St. Norbert College; West De Pere, Wis. (1898).....	Rev. Edward J. Wagner... Rev. Louis M. McCarthy...	151 M 332 M	Catholic
St. Olaf College; Northfield, Minn. (1874).....	Earl H. McClenney.....	434 C	Episcopal
St. Patrick's Seminary; Menlo Park, Calif. (1898).....	Rev. J. J. Shanahan.....	1,899 M ⁶	Catholic
St. Paul Seminary; St. Paul, Minn. (1895).....	Rev. D. W. Kucera.....	425 M ⁶	Catholic
St. Paul's College; Lawrenceville, Va. (1888).....	Sister Catherine Francis..	1,143 F ⁶	Catholic
St. Peter's College; Jersey City, N. J. (1872).....	Sister J. Baldeschwiler... Sister M. Alfred Noble...	398 F 514 F ⁶	Catholic
St. Procopius College; Lisle, Ill. (1887).....	Sister M. C. Bowe.....	768 F	Catholic
St. Rose, College of; Albany, N. Y. (1920).....	Rt. Rev. J. P. Shannon... Rev. John F. Murphy....	1,645 M ⁶ 556 C	Catholic
St. Scholastica, College of; Duluth, Minn. (1912).....	Rev. Q. L. Schaut.....	896 M	Catholic
St. Teresa, College of; Kansas City, Mo. (1916).....	Sister M. Huberta.....	958 F ⁶	Catholic
Saint Teresa, College of; Winona, Minn. (1907).....	Dale H. Gramley.....	419 F ⁶	Moravian
St. Thomas, College of; St. Paul, Minn. (1885).....	Sister Mary Hilda.....	380 F	Catholic
St. Thomas, University of; Houston, Tex. (1947).....	Harmon Lowman.....	3,813 C	State
St. Vincent College; Latrobe, Pa. (1846).....	V. Rev. Russell Wilson... Mother Frances Danz...	398 M 435 F	Catholic
St. Xavier College; Chicago, Ill. (1847).....	Malcolm A. Love.....	10,173 C ¹⁶	State
Salem College; Winston-Salem, N. C. (1772).....	Ralph Prator.....	.....	State
Salem State Teachers College. See Mass. St. Teach. Col.	Rev. John F. X. Connolly	3,971 C	Catholic
Salve Regina College; Newport, R. I. (1947).....	Mother Catherine Parks..	429 F	Catholic
Sam Houston State Teachers College; Huntsville, Tex. (1879).....	Glenn S. Dumke.....	11,496 C	State
San Diego, Univ. of, Coll. for Men; San Diego, Calif. (1949) ²⁰	John T. Wahlquist.....	13,680 C	State
San Diego College for Women; San Diego, Calif. (1949) ²⁰	Rev. Valentine Healy....	76 M	Catholic
San Diego State College; San Diego, Calif. (1897).....	Rev. Patrick A. Donohoe..	1,818 M ⁶	Catholic
San Fernando Valley State College; Northridge, Calif. (1958).....	Paul L. Ward.....	419 F ⁶	Private
San Francisco, University of; San Francisco, Calif. (1855).....	D. D. Holt.....	73 C	Methodist
San Francisco College for Women; San Francisco, Calif. (1921).....	V. Rev. J. J. Long.....	2,003 M ⁶	Catholic
San Francisco State College; San Francisco, Calif. (1899) ⁴	Frederick Hard.....	253 F	Private
San Jose State College; San Jose, Calif. (1857).....	C. Dorr Demaray.....	1,177 C ⁸	Methodist
San Luis Rey College; San Luis Rey, Calif. (1929).....	V. Rev. A. A. Lemieux....	2,989 C ⁹	Catholic
Santa Clara, University of; Santa Clara & Los Gatos, Calif. (1851).....	Rt. Rev. J. J. Dougherty..	8,619 M, C	Catholic
Sarah Lawrence College; Bronxville, N. Y. (1926).....	Rev. William G. Ryan....	809 F ⁶	Catholic
Scarritt College for Christian Workers; Nashville, Tenn. (1892).....	O. S. Ikenberry.....	780 C	State
Scranton, University of; Scranton, Pa. (1888).....	F. Joseph Mullin.....	205 C	Episcopal
Scripps College; Claremont, Calif. (1926).....	Ralph E. Heiges.....	1,301 C	State
Seattle Pacific College; Seattle, Wash. (1891).....	Randall H. Minor.....	367 C	Baptist
Seattle University; Seattle, Wash. (1891).....	Sister Clarita.....	254 F ⁶	Catholic
Seton Hall University; South Orange, N. J. (1856) ⁴	Sister Benedicta Marie... William Edgar Park.....	526 F ⁶ 1,424 F ⁶	Catholic
Seton Hill College; Greensburg, Pa. (1883).....	W. E. Kerstetter.....	672 C	Private
Shepherd College; Shepherdstown, W. Va. (1871).....	Reuben P. Jeschke.....	802 C	Methodist
Shimer College; Mount Carroll, Ill. (1853).....	.....	.....	Baptist
Shippensburg State College; Shippensburg, Pa. (1871) ¹¹.....	.....	.....	.....
Shorter College; Rome, Ga. (1873).....	.....	.....	.....
Siena College; Memphis, Tenn. (1922).....	.....	.....	.....
Siena Heights College; Adrian, Mich. (1919).....	.....	.....	.....
Simmons College; Boston, Mass. (1899).....	.....	.....	.....
Simpson College; Indianola, Iowa (1860).....	.....	.....	.....
Sioux Falls College; Sioux Falls, S. Dak. (1883).....	.....	.....	.....

and Universities

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
College; Saratoga Springs, N. Y. (1911)	Val H. Wilson	1,222 F	Private
Rock State College; Slippery Rock, Pa. (1889) ¹¹	N. N. Weisenfluh	1,260 C	State
College; Northampton, Mass. (1871)	Thomas C. Mendenhall	2,395 F	Private
College; Ephraim, Utah (1888) ³⁰	Floyd S. Holm ¹⁷	414 C	State
University of the; Sewanee, Tenn. (1857)	Edward McCrady ¹⁵	648 M	Episcopal
Indiana University of; Columbia, S. C. (1801) ⁴	R. L. Sumwalt	4,936 C	State
Idaho State University of; Vermillion, S. Dak. (1882)	I. D. Weeks	2,282 C	State
Montana School of Mines & Tech.; Rapid City, S. Dak. (1885)	F. L. Partlo	839 C	State
North Dakota State College A & M; Brookings, S. Dak. (1881)	Hilton M. Briggs	3,247 C	State
Missouri State College; Cape Girardeau, Mo. (1873)	Mark F. Scully	2,345 C	State
Louisiana College; Hammond, La. (1925)	Luther H. Dyson	1,553 C	State
North State College; Durant, Okla. (1909)	A. E. Shearer	1,447 C	State
California, University of; Los Angeles, Calif. (1880)	Norman Topping	16,568 C	Private
Connecticut State College; New Haven, Conn. (1893)	Hilton C. Buley	3,120 C	State
Illinois University; Carbondale, Ill. (1869)	Delyte W. Morris	10,658 C ³	State
Methodist University; Dallas, Tex. (1911)	Willis M. Tate	6,776 C	Methodist
Presbyterian College; Collegedale, Tenn. (1893) ⁴	Conrad N. Rees	471 C	7th Day Adven.
Oregon College; Ashland, Oreg. (1926)	Elmo N. Stevenson	1,215 C	State
Arkansas State College; Magnolia, Ark. (1909)	Imon E. Bruce	903 C	State
University and A & M College; Scotlandville, La. (1880)	Felton G. Clark	4,343 C	State
Utah College of; Cedar City, Utah (1897) ³⁰	Royden C. Braithwaite ¹⁷	711 C ³	State
Missouri State College, Springfield, Mo. (1906)	Roy Ellis	2,741 C	State
Texas State College; San Marcos, Tex. (1899)	J. G. Flowers	2,264 C	State
University at Memphis; Memphis, Tenn. (1848)	Peyton N. Rhodes	655 C	Presbyterian
Nebraska College; Winfield, Kans. (1885)	C. Orville Strohl	567 C	Methodist ³
Louisiana Institute; Lafayette, La. (1898)	Joel L. Fletcher	4,200 C	State
North State College; Weatherford, Okla. (1903)	R. H. Burton	1,707 C	State
North University; Georgetown, Tex. (1840)	W. C. Finch	599 C	Methodist
College. See Atlanta University System			
College; Mobile, Ala. (1830)	Rev. A. W. Crandell	1,133 C	Catholic ³
College; Springfield, Mass. (1885)	Glenn A. Olds	1,482 C	Private
University; Stanford, Calif. (1885)	J. E. Wallace Sterling	8,442 C	Private
Justin State College; Nacogdoches, Tex. (1923)	Ralph W. Steen	1,809 C	State
College; Sterling, Kans. (1887)	William M. McCreery	366 C	Presbyterian ³
University; Deland & St. Petersburg, Fla. (1883)	J. O. Edmunds	1,419 C	Baptist ³
Institute of Technology; Hoboken, N. J. (1870)	Jess H. Davis	1,913 M	Private
College; Tuscaloosa, Ala. (1876)	Samuel B. Hay	460 C	Presbyterian
College; Menomonie, Wis. (1893)	Verne C. Fryklund	1,236 C	State
University; Boston, Mass. (1906)	Robert J. Munce	1,467 C	Private
College; Alpine, Tex. (1921)	Bryan Wildenthal	856 C	State
University; Selinsgrove, Pa. (1858)	Gustave W. Weber	558 C	Lutheran ³
College; Swarthmore, Pa. (1864)	Courtney Smith	916 C	Quaker ³
College; Sweet Briar, Va. (1901)	Anne Gary Pannell	531 F	Private
University; Syracuse & Utica, N. Y. (1870)	William P. Tolley ¹⁵	16,562 C	Private
College; Talladega, Ala. (1867)	Arthur D. Gray	314 C	Congregational ³
University of; Tampa, Fla. (1931)	David M. Delo	1,741 C	Private
College; Tarkio, Mo. (1883)	Vacant	291 C ¹⁶	Presbyterian ³
College; Stephenville, Tex. (1899)	E. J. Howell	1,758 C	State
University; Upland, Ind. (1846)	B. Joseph Martin	724 C ¹⁶	Private
University; Philadelphia, Pa. (1884)	Millard E. Gladfelter	11,944 C	Private
University of; Knoxville, Tenn. (1794) ⁴	Andrew D. Holt	11,018 C	State
Dr. & Ind. State University; Nashville, Tenn. (1912)	Walter S. Davis	3,087 C	State
Polytechnic Institute; Cookeville, Tenn. (1915)	W. E. Derryberry	2,600 C	State
Presbyterian College; Athens, Tenn. (1857)	Ralph W. Mohny	612 C	Methodist
College of; College Station, Tex. (1876)	James Earl Rudder	6,366 M	State
University of; Austin, Tex.	Logan Wilson		State
University; Austin, Tex. (1883)	H. H. Ransom ¹⁸	17,012 C	State
College; Houston, Tex. (1905)	John V. Olson ²¹	418 C	State
College; Galveston, Tex. (1890)	John B. Truslow ¹⁷	713 C	State
Medical School; Dallas, Tex. (1943)	A. J. Gill ²¹	403 C	State
College; El Paso, Tex. (1913)	Joseph R. Smiley	3,625 C	State
University; Fort Worth, Tex. (1873)	McGruder E. Sadler ¹⁵	6,509 C	Disc. of Christ ³
College of Arts & Ind.; Kingsville & Weslaco, Tex. (1917)	Ernest H. Poteet	2,674 C	State
College; Sequin, Tex. (1891)	Marcus C. Rieke	589 C	Lutheran
University; Houston, Tex. (1947)	S. M. Nabrit	2,942 C	State
ological College; Lubbock, Tex. (1923)	R. C. Goodwin ⁵	8,089 C	State
College; Ft. Worth, Tex. (1890)	Law Sone	1,210 C ¹⁶	Methodist
College. See Texas, University of			
University; Denton, Texas (1901)	John A. Guinn	2,481 F	State
Greenville, Pa. (1866)	Fredric B. Irvin	762 C	Lutheran
University; Forsyth, Ga. (1849)	Carey T. Vinzant	538 F	Baptist
University of; Toledo, Ohio (1872)	William S. Carlson	5,345 C	City

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
Tougaloo Southern Christian College; Tougaloo, Miss. (1869)	S. C. Kincheloe	489 C	Cong. & D.
Transylvania College; Lexington, Ky. (1780)	Irvin E. Lunger	463 C	Disc. of Chr.
Trenton State College; Trenton, N. J. (1855)	Edwin L. Martin	3,005 C	State
Trinity College; Burlington, Vt. (1925)	Sister Mary Claver	281 F	Catholic ²
Trinity College; Hartford, Conn. (1823)	Albert C. Jacobs	1,298 M ⁶	Episcopal ²
Trinity College; Washington, D. C. (1897)	Sister Margaret	670 F	Catholic ²
Trinity University; San Antonio, Tex. (1869)	J. W. Laurie	1,607 C	Presbyterian
Troy State College; Troy, Ala. (1887)	Charles B. Smith	1,480 C	State
Tufts University; Medford & Boston, Mass. (1852) ²¹	Nils Y. Wessell	4,255 C	Private
Tulane University; New Orleans, La. (1834) ²⁶	Rufus C. Harris	6,225 Co	Private
Tulsa, University of; Tulsa, Okla. (1894)	Ben G. Henneke	5,157 C	Presbyterian
Tusculum College; Greenville, Tenn. (1794)	Raymond C. Rankin	384 C	Presbyterian
Tuskegee Institute; Tuskegee Institute, Ala. (1881)	L. H. Foster	2,170 C	Private
Union College; Barbourville, Ky. (1879)	Mahlon A. Miller	712 C	Methodist
Union College; Lincoln, Nebr., & Denver, Colo. (1891)	David J. Bieber	819 C	7th Day Adv.
Union College & University; Schenectady & Albany, N. Y. (1795)	Carter Davidson	2,250 M ⁴	Private
Union University; Jackson, Tenn. (1825)	Warren F. Jones	639 C	Baptist
U. S. Air Force Academy; Colorado Springs, Colo. (1954)	Major Gen. W. S. Stone ³²	1,450 M	Federal
U. S. Coast Guard Academy; New London, Conn. (1876)	R. Adm. S. H. Evans ³²	572 M	Federal
U. S. Merchant Marine Academy; Kings Point, N. Y. (1942)	R. Adm. G. McLintock ³²	886 M	Federal
U. S. Military Academy; West Point, N. Y. (1802)	Lt. Gen. G. H. Davidson ³²	2,512 M	Federal
U. S. Naval Academy; Annapolis, Md. (1845)	R. Adm. Charles L. Melson ³²	3,648 M	Federal
U. S. Naval Postgraduate School; Monterey, Calif. (1909)	R. Adm. E. E. Yoemans ³²	724 M ⁶	Federal
Upland College; Upland, Calif. (1920)	John Z. Martin	270 C	Brethren
Upper Iowa University; Fayette, Iowa (1857)	Eugene E. Garbee	529 C	Private
Upsala College; East Orange, N. J. (1893)	Evald B. Lawson	2,072 C	Lutheran
Ursinus College; Collegeville, Pa. (1869)	Donald L. Helfferich	872 C	Un. Ch. of C.
Ursuline College; Louisville, Ky. (1938)	Mother M. Cosma	414 F	Catholic ²
Ursuline College for Women; Cleveland, Ohio (1871)	Mother Marie Sands	315 F	Catholic ²
Utah, University of; Salt Lake City, Utah (1850) ⁴	A. Ray Olpin	9,833 C ⁸	State
Utah State U. of Agr. & Applied Science; Logan, Utah (1888) ³⁰	Daryl Chase	4,964 C	State
Valdosta State College; Valdosta, Ga. (1906)	J. Ralph Thaxton	608 C	State
Valparaiso University; Valparaiso, Ind. (1853)	O. P. Kretzmann	2,864 C ¹⁶	Lutheran ¹
Vanderbilt University; Nashville, Tenn. (1872)	Harvie Branscomb ¹⁵	3,736 C	Private
Vassar College; Poughkeepsie, N. Y. (1861)	Sarah Blanding	1,369 F	Private
Vermont, University of; Burlington, Vt. (1791)	John T. Fey	2,986 C	State
Villa Maria College; Erie, Pa. (1925)	Mother M. Aurelia	709 F	Catholic ²
Villanova University; Villanova, Pa. (1842)	V. Rev. J. A. Klekotka	6,428 C	Catholic ²
Virginia, University of; Charlottesville, Va. (1819) ^{4, 25}	Edgar F. Shannon, Jr.	4,282 Co	State
Virginia Military Institute; Lexington, Va. (1839)	Maj. Gen. G. R. E. Shell ³²	1,077 M	State
Virginia Polytechnic Institute; Blacksburg, Va. (1872) ²⁷	Walter S. Newman	4,688 C ⁸	State
Virginia State College; Petersburg & Norfolk, Va. (1882)	R. P. Daniel	2,534 C	State
Virginia Union University; Richmond, Va. (1865)	Samuel DeWitt Proctor	856 C	Baptist ²
Viterbo College; La Crosse, Wis. (1931)	Sister M. Francesca	341 F	Catholic ²
Wabash College; Crawfordsville, Ind. (1832)	Byron K. Trippet	586 M	Private
Wagner College; Staten Island, N. Y. (1883)	Richard H. Heindel	1,322 C	Lutheran ¹
Wake Forest College; Winston-Salem, N. C. (1834)	Harold W. Tribble	2,302 C	Baptist
Walla Walla College; College Place, Wash. (1892)	Percy W. Christian	1,352 C	7th Day Adv.
Warburg College; Waverly, Iowa (1852)	C. H. Becker	914 C	Lutheran
Washburn University of Topeka; Topeka, Kans. (1865)	Bryan S. Stofer	1,804 C	City
Washington, University of; Seattle, Wash. (1861)	Charles E. Odegaard	15,947 C ¹⁰	State
Washington College; Chestertown, Md. (1782)	Daniel Z. Gibson	451 C	Private
Washington & Jefferson College; Washington, Pa. (1781)	Boyd C. Patterson	728 M	Private
Washington & Lee University; Lexington, Va. (1749)	Fred C. Cole	1,076 M	Private
Washington Missionary College; Takoma Park, Md. (1904)	Charles B. Hirsch	904 C	7th Day Adv.
Washington State University; Pullman, Wash. (1890)	C. Clement French	5,932 C	State
Washington University; St. Louis, Mo. (1853)	Ethan A. Shepley ¹⁵	11,727 C	Private
Wayland Baptist College; Plainview, Tex. (1908)	A. Hope Owen	566 C	Baptist
Wayne State University; Detroit, Mich. (1868)	Clarence B. Hilberry	20,510 C ¹⁰	State
Waynesburg College; Waynesburg & Uniontown, Pa. (1849)	Paul R. Stewart	1,214 C	Presbyterian
Webb Institute of Naval Architecture; Glen Cove, N. Y. (1889)	R. Adm. F. E. Haerberle	76 M	Private
Webster College; Webster Groves, Mo. (1915)	Sister M. F. Barberis	648 F	Catholic ²
Wellesley College; Wellesley, Mass. (1870)	Margaret Clapp	1,694 F	Private
Wells College; Aurora, N. Y. (1868)	L. J. Long	398 F	Private
Wesleyan College; Macon, Ga. (1836)	W. Earl Strickland	486 F ⁸	Methodist
Wesleyan University; Middletown, Conn. (1831)	V. L. Butterfield	867 M ⁸	Private
West Chester State College; West Chester, Pa. (1871) ¹¹	H. LaRue Frain ⁵	2,253 C	State
West Liberty State College; West Liberty, W. Va. (1837)	Paul N. Elbin	1,221 C	State
West Texas State College; Canyon, Tex. (1910)	James P. Cornette	2,790 C	State
West Virginia Institute of Technology; Montgomery, W. Va. (1895)	William B. Axtell	886 C	State
West Virginia State College; Institute, W. Va. (1891)	William J. L. Wallace	1,836 C	State
West Virginia University; Morgantown, W. Va. (1867)	Elvis J. Stahr, Jr.	5,957 C	State

Institution, location and (date founded)	Chief executive ¹	Students ²	Control
Wesleyan College; Buckhannon, W. Va. (1890).....	Stanley H. Martin.....	1,005 C	Methodist
Carolina College; Cullowhee, N. C. (1889).....	Paul A. Reid.....	1,397 C	State
College for Women; Oxford, Ohio (1853).....	Herrick B. Young.....	308 F	Private
Illinois University; Macomb, Ill. (1899).....	A. L. Knoblauch.....	2,998 C ¹⁰	State
Kentucky State College; Bowling Green, Ky. (1906).....	Kelly Thompson.....	2,708 C	State
Maryland College; Westminster, Md. (1867).....	Lowell S. Ensor.....	909 C	Methodist ³
Michigan University; Kalamazoo, Mich. (1903).....	Paul V. Sangren.....	8,166 C	State
Montana College of Education; Dillon, Mont. (1897).....	James E. Short.....	453 C ¹⁰	State
Nevada University; Cleveland, Ohio (1826).....	John Schoff Millis.....	7,129 C	Private
Norfolk College of Colorado; Gunnison, Colo. (1901).....	Grant Venn.....	1,103 C	State
Washington Coll. of Education; Bellingham, Wash. (1899).....	James L. Jarrett.....	2,446 C	State
College; Le Mars, Iowa (1890).....	Harry H. Kalas.....	550 C	Evan. Un. Breth.
College; Fulton, Mo. (1851).....	Robert Davidson.....	525 M	Presbyterian
College; New Wilmington, Pa. (1852).....	Will W. Orr.....	1,294 C	Presbyterian ³
College; Salt Lake City, Utah (1875).....	Frank E. Duddy, Jr.....	367 C	Protestant ³
Theological Seminary; Philadelphia, Pa. (1929).....	Cornelius Van Til.....	82 M	Private
College; Santa Barbara, Calif. (1940).....	Roger J. Voskuyl.....	408 C	Private
College; Norton, Mass. (1834).....	A. Howard Meneely.....	733 F	Private
College; Wheaton, Ill. (1860).....	V. R. Edman.....	1,853 C	Private
College; Boston, Mass. (1888).....	Frances Mayfarth.....	400 F	Private
College; Walla Walla, Wash. (1859).....	Louis B. Perry.....	805 C	Private
College; Whittier, Calif. (1901).....	Paul S. Smith.....	1,160 C	Quaker ³
College; Spokane, Wash. (1890).....	Frank F. Warren.....	1,291 C	Presbyterian ³
University of; Wichita, Kansas (1895).....	Harry F. Corbin.....	5,364 C	City
College; Wilkes-Barre, Pa. (1933).....	Eugene S. Farley.....	1,672 C	Private
University; Salem, Oreg. (1842).....	G. H. Smith.....	1,060 C	Methodist ³
College of; Williamsburg, Va. (1693) ⁴	Alvin Duke Chandler.....	6,055 C	State
College; Hattiesburg, Miss. (1906).....	J. Ralph Noonkester.....	346 C	Baptist
College; Liberty, Mo. (1849).....	Walter Pope Binns.....	892 C	Baptist ³
College. See Hobart & William Smith Colleges.....			
College; Williamstown, Mass. (1793).....	James P. Baxter.....	1,120 M	Private
State College; Willimantic, Conn. (1889).....	J. Eugene Smith.....	601 C	State
College; Wilmington, Ohio (1870).....	W. Brooke Morgan, Jr. ⁵	654 C	Quaker ³
College; Chambersburg, Pa. (1869).....	Paul S. Havens.....	520 F	Presbyterian ³
College; Winona, Minn. (1858).....	Nels Minné.....	1,073 C	State
College; Rock Hill, S. C. (1886).....	Charles S. Davis.....	1,292 F	State
University of; Madison, Wis. (1849).....	Conrad A. Elvehjem.....	26,214 C ¹⁸	State
College; Eau Claire, Wis. (1916).....	Leonard Haas.....	1,985 C	State
College; La Crosse, Wis. (1909).....	Rexford S. Mitchell.....	1,822 C	State
College; Oshkosh, Wis. (1871).....	Roger E. Guiles.....	1,887 C	State
College; River Falls, Wis. (1874).....	E. H. Kleinpell.....	1,235 C	State
College; Stevens Point, Wis. (1894).....	William C. Hansen.....	1,505 C	State
College; Superior, Wis. (1896).....	Jim Dan Hill.....	1,303 C	State
College; Whitewater, Wis. (1868).....	Robert C. Williams.....	1,561 C	State
College & Inst. of Tech.; Platteville, Wis. (1866).....	Bjarne R. Ullsvik.....	1,527 C	State
University; Springfield, Ohio (1845).....	Clarence C. Stoughton.....	2,655 C	Lutheran
College; Spartanburg, S. C. (1854).....	Charles F. Marsh.....	604 M	Methodist
College; Woodstock, Md. (1869).....	Rev. Edward J. Sponga.....	245 M	Catholic
College of; Wooster, Ohio (1866).....	Howard F. Lowry.....	1,232 C	Presbyterian
Polytechnic Institute; Worcester, Mass. (1865).....	Arthur B. Bronwell.....	1,097 M	Private
University of; Laramie, Wyo. (1887) ⁴	George D. Humphrey.....	4,285 C ¹⁶	State
University; Cincinnati, Ohio (1831).....	V. Rev. P. L. O'Connor.....	3,751 M ⁶	Catholic ³
University of Louisiana; New Orleans, La. (1925).....	Sister M. Josephina.....	982 C	Catholic ³
University; New Haven, Conn. (1701).....	A. Whitney Griswold.....	7,686 M ⁶	Private
College; Yankton, S. Dak. (1881).....	Adrian Rondileau.....	302 C	Congregational ³
University; New York, N. Y. (1886).....	Samuel Belkin.....	4,653 Co	Jewish ³
University; Youngstown, Ohio (1908).....	Howard W. Jones.....	5,771 C	Private

unless otherwise indicated.
F—female; C—coeduca-
—co-ordinate; i.e., sepa-
—for men and women.
but not actually con-

ampus or campuses else-
ident.

includes opposite sex
or special courses and/or
work.

Alabama Polytechnic In-

0.

College is women's school
ia University.

9.

¹¹ Part of Pennsylvania State Teach-
ers College.

¹² Jewish sponsored, non-sectarian.

¹³ Pembroke College is women's school
of Brown University.

¹⁴ Spring 1959.

¹⁵ Chancellor.

¹⁶ Fall 1959.

¹⁷ Director.

¹⁸ Provost.

¹⁹ Rector.

²⁰ Formerly Teachers College of Con-
necticut.

²¹ Dean.

²² Douglass College is women's school
of Rutgers University.

²³ Radcliffe College is women's school
of Harvard University.

²⁴ Hobart College, 1822, is for men;
William Smith College, 1908, is for
women.

²⁵ Mary Washington College is wom-
en's school of University of Virginia.

²⁶ Newcomb College is women's school
of Tulane University.

²⁷ Radford College is women's school
of Virginia Polytechnic Institute.

²⁸ Superior.

²⁹ San Diego College for Women is
women's school of University of
San Diego.

³⁰ Snow College and College of South-
ern Utah are branches of Utah State
University.

³¹ Jackson College is women's school
of Tufts University.

³² Superintendent.

U. S. Junior Colleges

(Source: Junior College Directory, 1960, Published by American Association of Junior Colleges)

Institution	Location	Institution	Location
ALABAMA		Los Angeles Metropolitan College of Business	
Publicly controlled		Los Angeles Pierce College	Los Angeles
Alabama State College Branch	Mobile	Los Angeles Trade-Technical College	Los Angeles
Privately controlled		Los Angeles Valley College	Van Nuys
Alabama Christian College	Montgomery	Modesto Junior College	Modesto
Daniel Payne College	Birmingham	Monterey Peninsula College	Monterey
Marion Institute	Marion	Mt. San Antonio College	Walnut
Sacred Heart College	Cullman	Napa Junior College	Napa
St. Joseph's Junior College	Holy Trinity	Napa Evening College	Napa
Snead Junior College	Boaz	Oakland City College	Oakland
The Southern Union College	Wadley	Oceanside-Carlsbad College	Oceanside
Walker College	Jasper	Orange Coast College	Costa Mesa
ALASKA		Palo Verde College	Blythe
Publicly controlled		Palomar College	San Marcos
Anchorage Community College	Anchorage	Pasadena City College	Pasadena
Juneau-Douglas Comm. Coll.	Juneau	Porterville College	Porterville
Ketchikan Comm. College	Ketchikan	Reedley College	Reedley
Palmer Community College	Palmer	Riverside City College	Riverside
Privately controlled		Sacramento City College	Sacramento
Sheldon Jackson Junior College	Sitka	Sacramento Evening City College	Sacramento
ARIZONA		San Benito College	Hollister
Publicly controlled		San Bernardino Valley College	San Bernard
Eastern Arizona Junior College	Thatcher	San Diego Junior College	San Diego
Phoenix College	Phoenix	San Jose City College	San Jose
ARKANSAS		San Jose Evening Jr. Col.	San Jose
Publicly controlled		San Mateo, College of	San Mateo
Arkansas St. Coll. Beebe Br.	Beebe	Santa Ana College	Santa Ana
Privately controlled		Santa Barbara City College	Santa Barba
Fort Smith Junior College	Fort Smith	Santa Monica City College	Santa Monica
Little Rock Junior College	Little Rock	Santa Rosa Junior College	Santa Rosa
Shorter College	N. Little Rock	Sequoias, College of the	Visalia
Southern Baptist College	Walnut Ridge	Shasta College	Redding
CALIFORNIA		Sierra College	Auburn
Publicly controlled		Stockton College	Stockton
Allan Hancock College	Santa Maria	Taft College	Taft
American River Jr. College	Sacramento	Vallejo Junior College	Vallejo
Antelope Valley College	Lancaster	Ventura College	Ventura
Bakersfield College	Bakersfield	Yuba College	Marysville
Cabrillo College	Watsonville	Privately controlled	
Cerritos Junior College	Norwalk	California Concordia College	Oakland
Chaffey College	Alta Loma	Cogswell Polytechnic College	San Francisco
Citrus Junior College	Azusa	Deep Springs College	Deep Springs
City College of San Francisco	San Francisco	Humphreys College	Stockton
Coalinga College	Coalinga	Los Angeles Pacific College	Los Angeles
College of Marin	Kentfield	Menlo College	Menlo Park
Compton College	Compton	COLORADO	
Contra Costa College	San Pablo	Publicly controlled	
Diablo Valley College	Concord	Ft. Lewis Agric. & Mech. Coll.	Durango
East Los Angeles College	Los Angeles	Lamar Junior College	Lamar
El Camino College	El Camino	Mesa College	Grand Junction
Foothill College	Mountain View	Northeastern Junior College	Sterling
Fresno City College	Fresno	Otero County Junior College	La Junta
Fullerton Junior College	Fullerton	Pueblo Junior College	Pueblo
Fullerton Evening Jr. Col.	Fullerton	Trinidad State Junior College	Trinidad
Glendale College	Glendale	Privately controlled	
Hartnell College	Salinas	Colorado Woman's College	Denver
Imperial Valley College	El Centro	CONNECTICUT	
Lassen Junior College	Susanville	Publicly controlled	
Long Beach City College	Long Beach	Junior College of Connecticut	Bridgeport
Los Angeles City College	Los Angeles	Hartford College	Hartford
Los Angeles Harbor College	Wilmington	Mitchell College	New London
		New Haven College	New Haven
		Our Lady of the Angels J. C.	Enfield
		Quinnipiac College	Hamden
		St. Thomas Seminary	Bloomfield

Colleges

Institution	Location	Institution	Location
WARE		Lewis-Clark Normal Sch.....	Lewiston
tely controlled		North Idaho Junior College.....	Coeur d'Alene
College.....	Dover	Privately controlled	
RICT OF COLUMBIA		College of St. Gertrude.....	Cottonwood
tely controlled		Ricks College.....	Rexburg
own Visitation Jr. Col.....	Washington	ILLINOIS	
sh. Univ. Jr. Col.....	Washington	Publicly controlled	
ata Junior College.....	Washington	Belleville Junior College.....	Belleville
e Webster Jr. Col.....	Washington	Centralia Township Jr. Col.....	Centralia
on Junior College.....	Washington	Chicago City Junior College	
Jr. Col. of Finance.....	Washington	Amundsen Branch.....	Chicago
all Junior College.....	Washington	Crane Branch.....	Chicago
IDA		Fenger Branch.....	Chicago
tely controlled		Southeast Branch.....	Chicago
Florida Junior College.....	Ocala	Woodrow Wilson Branch.....	Chicago
Junior College.....	Marianna	Wright Branch.....	Chicago
Beach Junior College.....	Daytona Beach	Danville Junior College.....	Danville
Junior College.....	St. Petersburg	Elgin Community College.....	Elgin
st Comm. J. C.....	Panama City	Joliet Junior College.....	Joliet
n Junior College.....	Ocala	La Salle-Peru-Oglesby Jr. Col.....	La Salle
e Junior College.....	Bradenton	Lyons Township Jr. Col.....	La Grange
orida Junior College.....	Madison	Moline Community College.....	Moline
ach Junior College.....	Lake Worth	Morton Junior College.....	Cicero
la Junior College.....	Pensacola	Mt. Vernon Com. Col.....	Mt. Vernon
nt Junior College.....	W. Palm Beach	Thornton Junior College.....	Harvey
ld Comm. Jr. College.....	Panama City	Privately controlled	
is River Junior College.....	Palatka	De Lourdes College (Junior).....	Des Plaines
rsburg Junior College.....	St. Petersburg	The Felician College.....	Chicago
County Comm. College.....	Daytona Beach	Kendall College.....	Evanston
ton Junior College.....	Pensacola	Lincoln College.....	Lincoln
tely controlled		Mallinckrodt College.....	Wilmette
Waters College.....	Jacksonville	Monticello College.....	Alton
Christian College.....	Tampa	North Park College.....	Chicago
ville Univ. Jr. College.....	Jacksonville	Peoria College.....	Peoria
Junior College.....	Orlando	St. Bede Junior College.....	Peru
GIA		St. Henry Preparatory Seminary.....	Belleville
tely controlled		St. Joseph's Seminary.....	Westmont
n Baldwin Agric. Col.....	Tifton	Springfield Junior College.....	Springfield
ng Col. of Savannah.....	Savannah	INDIANA	
College.....	Augusta	Publicly controlled	
s College.....	Columbus	Indiana University Extension Centers	
Military College.....	Milledgeville	Calumet Center.....	East Chicago
Southwestern College.....	Americus	Earlham College.....	Richmond
Georgia College.....	Cochran	Fort Wayne.....	Fort Wayne
Georgia College.....	Douglas	Gary.....	Gary
orgia College.....	Carrollton	Indianapolis.....	Indianapolis
tely controlled		Kokomo.....	Kokomo
College.....	Cuthbert	So. Bend-Mishawaka.....	South Bend
d Junior College.....	Thomasville	Southeastern.....	Jeffersonville
Parker Junior College.....	Mt. Vernon	Vincennes.....	Vincennes
el College.....	Franklin Sprgs.	Purdue University Extension Centers	
t-Oxford.....	Oxford	Calumet Center.....	Hammond
Military College.....	Barnesville	Fort Wayne Center.....	Fort Wayne
College.....	Norman Park	Marott Center.....	Indianapolis
dt College.....	Waleska	Purdue-Barker Center.....	Michigan City
McConnell College.....	Cleveland	Vincennes University.....	Vincennes
Harris College.....	Young Harris	Privately controlled	
II		Ancilla Domini College.....	Donaldson
tely controlled		Our Lady of the Lake Seminary.....	Syracuse
urch College of Hawaii.....	Laie, Oahu	Victory Noll Junior College.....	Huntington
u College.....	Paia, Maui	IOWA	
O		Publicly controlled	
tely controlled		Boone Junior College.....	Boone
Junior College.....	Boise	Burlington College.....	Burlington
		Centerville Comm. College.....	Centerville

Institution	Location	Institution	Location
Clarinda Junior College.....	Clarinda	Privately controlled	
Clinton Junior College.....	Clinton	Oblate College & Seminary.....	Bar Harbor
Creston Junior College.....	Creston	Ricker College.....	Houlton
Eagle Grove Junior College.....	Eagle Grove	Thomas Junior College.....	Waterville
Ellsworth Junior College.....	Iowa Falls	Westbrook Junior College.....	Portland
Emmetsburg Comm. College.....	Emmetsburg		
Estherville Junior College.....	Estherville		
Fort Dodge Junior College.....	Fort Dodge		
Keokuk Community College.....	Keokuk		
Marshalltown Jr. College.....	Marshalltown		
Mason City Junior College.....	Mason City		
Muscatine Junior College.....	Muscatine		
Webster City Junior College.....	Webster City		

Privately controlled

Dordt College.....	Sioux Center
Graceland College.....	Lamoni
Grand View College.....	Des Moines
Mt. St. Clare College.....	Clinton
Northwestern College.....	Orange City
Ottumwa Heights College.....	Ottumwa
Waldorf College.....	Forest City

KANSAS

Publicly controlled

Arkansas City Junior College.....	Arkansas City
Chanute Junior College.....	Chanute
Coffeyville College.....	Coffeyville
Dodge City College.....	Dodge City
El Dorado Junior College.....	El Dorado
Fort Scott Junior College.....	Fort Scott
Garden City Junior College.....	Garden City
Highland Junior College.....	Highland
Hutchinson Junior College.....	Hutchinson
Independence Comm. Col.....	Independence
Iola Junior College.....	Iola
Kansas City Junior College.....	Kansas City
Parsons Junior College.....	Parsons
Pratt Junior College.....	Pratt

Privately controlled

Central College.....	McPherson
Donnelly College.....	Kansas City
Friends Bible School.....	Haviland
Hesston College.....	Hesston
Miltonvale Wesleyan.....	Miltonvale
St. John's Lutheran College.....	Winfield

KENTUCKY

Publicly controlled

Paducah Junior College.....	Paducah
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Privately controlled

Bethel College.....	Hopkinsville
Caney Junior College.....	Pippa Passes
Cumberland College.....	Williamsburg
Lees Junior College.....	Jackson
Lindsey Wilson College.....	Columbia
Loretto Junior College.....	Nerinx
Midway Junior College.....	Midway
Pikeville College.....	Pikeville
St. Catharine Junior College.....	St. Catharine
Sue Bennett College.....	London

LOUISIANA

Privately controlled

St. Joseph Seminary.....	St. Benedict
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MAINE

Publicly controlled

Univ. of Maine in Portland.....	Portland
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Institution	Location
Privately controlled	
Oblate College & Seminary.....	Bar Harbor
Ricker College.....	Houlton
Thomas Junior College.....	Waterville
Westbrook Junior College.....	Portland

MARYLAND

Publicly controlled

Baltimore Junior College.....	Baltimore
Catonsville Community College.....	Catonsville
Charles County Junior College.....	La Plata
Essex Community College.....	Essex
Frederick Community College.....	Frederick
Hagerstown Junior College.....	Hagerstown
Harford Junior College.....	Bel Air
Montgomery Junior College.....	Takoma Park
Prince George's Comm. Coll.....	Suitland
St. Mary's Seminary J. C.....	St. Mary's C.
State Teachers College.....	Frostburg
State Teachers College.....	Salisbury
State Teachers Coll. at Towson.....	Baltimore

Privately controlled

Baltimore College of Commerce.....	Baltimore
Baltimore Jr. Coll., Univ. of.....	Baltimore
Eastern Coll. of Commerce & Law.....	Baltimore
St. Charles College.....	Catonsville
St. Peters College.....	Baltimore
Villa Julie College.....	Stevenson
Xaverian College.....	Silver Spring

MASSACHUSETTS

Publicly controlled

Holyoke Junior College.....	Holyoke
Newton Junior College.....	Newtonville
Quincy Junior College.....	Quincy

Privately controlled

Bay Path Junior College.....	Longmeadow
Becker Junior College.....	Worcester
Boston University Junior College.....	Boston
Bradford Junior College.....	Bradford
Burdett College.....	Boston
Cambridge Junior College.....	Cambridge
Chamberlayne Junior College.....	Boston
Dean Junior College.....	Franklin
Endicott Junior College.....	Beverly
Fisher Junior College.....	Boston
Franklin Tech. Institute.....	Boston
Garland School, a Junior College.....	Boston
Lasell Junior College.....	Auburndale
Leicester Junior College.....	Leicester
Nichols College of Bus. Adm.....	Dudley
Pine Manor Junior College.....	Wellesley
Wentworth Institute.....	Boston
Worcester Junior College.....	Worcester

MICHIGAN

Publicly controlled

Alpena Community College.....	Alpena
Battle Creek—See Kellogg Community College	
Bay City Junior College.....	Bay City
Community Coll. & Tech. Inst.....	Benton Harbor
Flint Comm. Jr. Coll.....	Flint
Gogebic Community College.....	Ironwood
Grand Rapids Junior College.....	Grand Rapids
Henry Ford Community College.....	Dearborn
Highland Park Junior College.....	Highland Park
Jackson Junior College.....	Jackson
Kellogg Community College.....	Battle Creek

Colleges

Institution	Location	Institution	Location
Community College.....	Lansing	Privately controlled	
on Community College.....	Muskegon	Christian College.....	Columbia
entral Michigan Coll.....	Petosky	Cottey College.....	Nevada
stern Michigan College.....	Traverse City	Hannibal-LaGrange College.....	Hannibal
on Junior College.....	Port Huron	J. C. of the Sch. of the Ozarks.....	Point Lookout
acomb Com. Coll.....	Warren	Kemper Military School.....	Boonville
ely controlled		Mercy Junior College.....	St. Louis
h's Seminary.....	Grand Rapids	St. Mary's Junior College.....	O'Fallon
arbor Junior College.....	Spring Arbor	St. Paul's College.....	Concordia
College.....	Hancock	Southwest Baptist College.....	Bolivar
		Stephens College.....	Columbia
		Wentworth Military Academy.....	Lexington
		William Woods College.....	Fulton
ESOTA		MONTANA	
ly controlled		Publicly controlled	
Junior College.....	Austin	Custer County Junior College.....	Miles City
Junior College.....	Brainerd	Dawson County Junior College.....	Glendive
or College.....	Ely		
Junior College.....	Eveleth	NEBRASKA	
Junior College.....	Hibbing	Publicly controlled	
Junior College.....	Coleraine	Fairbury Junior College.....	Fairbury
or Junior College.....	Rochester	McCook Junior College.....	McCook
Junior College.....	Virginia	Norfolk Junior College.....	Norfolk
ton Junior College.....	Worthington	Scottsbluff College.....	Scottsbluff
ely controlled		Privately controlled	
Lutheran College.....	Mankato	Luther Junior College.....	Wahoo
a College.....	St. Paul		
Seminary.....	Onamia		
MISSISSIPPI		NEW HAMPSHIRE	
ly controlled		Privately controlled	
Junior College.....	Clarksdale	Colby Junior College.....	New London
Lincoln Junior College.....	Wesson		
tral Junior College.....	Decatur	NEW JERSEY	
Mississippi Jr. Coll.....	Scoba	Publicly controlled	
Junior College.....	Meridian	Trenton Junior College.....	Trenton
Junior College.....	Raymond	Privately controlled	
Junior College.....	Goodman	Assumption Junior College.....	Mendham
a Junior College.....	Fulton	Centenary College for Women.....	Hackettstown
nty Junior College.....	Ellisville	Immaculate Conception J. C.....	Lodi
Municipal Jr. Coll.....	Meridian	Monmouth College.....	West Long Branch
st Mississippi J. C.....	Booneville	Mother of the Savior Seminary.....	Blackwood
st Mississippi J. C.....	Senatobia	St. Joseph's College.....	Princeton
yer Junior College.....	Poplarville	Tombrock Junior College.....	Paterson
on Junior College.....	Perkinston	Union Junior College.....	Cranford
st Mississippi J. C.....	Summit	Villa Walsh College.....	Morristown
er Junior College.....	Moorhead		
ior College.....	Utica		
ely controlled		NEW MEXICO	
st' Episcopal J. C.....	Vicksburg	Publicly controlled	
hpbell College.....	Jackson	Carlsbad Community College.....	Carlsbad
emorial College.....	Newton	New Mexico Military Inst.....	Roswell
k College.....	Gulfport		
mes Junior College.....	West Point	NEW YORK	
Junior College.....	Natchez	Publicly controlled	
College.....	Okolona	Community Colleges (under the program	
ods Country Life School.....	Piney Woods	of the State University of New York)	
Institute.....	Prentiss	Auburn Community College.....	Auburn
ior College.....	Mathiston	Bronx Community College.....	New York
		Broome Tech. Com. Col.....	Binghamton
		Corning Community College.....	Corning
		Dutchess Community College.....	Poughkeepsie
		Erie County Tech. Inst.....	Buffalo
		Fashion Inst. of Tech.....	New York
		Hudson Valley Tech. Inst.....	Troy
		Jamestown Community College.....	Jamestown
		Mohawk Valley Tech. Inst.....	Utica
		New York City Com. Col.....	Brooklyn
		New York Inst. of Tech.....	New York
		Orange County Com. Col.....	Middletown
OURI			
ly controlled			
Junior College.....	Flat River		
achers College.....	St. Louis		
Junior College.....	Joplin		
College of Kansas City.....	Kansas City		
Junior College.....	Moberly		
h Junior College.....	St. Joseph		
Junior College.....	Trenton		

Institution	Location	Institution	Location
Staten Island Com. Col.	Staten Island	OHIO	
Westchester Com. Col.	Valhalla	Publicly controlled	
Operated by State University of New York		Univ. of Toledo Jr. Col.	Toledo
Agricultural & Tech. Inst.	Alfred	Privately controlled	
Agricultural & Tech. Inst.	Canton	Franklin University	Columbus
Agricultural & Tech. Inst.	Cobleskill	Ohio College of Applied Science	Cincinnati
Agricultural & Tech. Inst.	Delhi	Salmon P. Chase College	Cincinnati
Agricultural & Tech. Inst.	Farmingdale	Sinclair College	Dayton
Agricultural & Tech. Inst.	Morrisville	Tiffin University	Tiffin
Privately controlled		Urbana Junior College	Urbana
Bellarmino College	Plattsburgh	OKLAHOMA	
Bennett College	Millbrook	Publicly controlled	
Briarcliff College	Briarcliff Manor	Altus Junior College	Altus
Catherine McAuley Jr. Col.	Rochester	Cameron State Ag. Col.	Lawton
Cazenovia Junior College	Cazenovia	Connors State Ag. Col.	Warner
Concordia Collegiate Inst.	Bronxville	Eastern Oklahoma A & M Col.	Wilburton
Divine Word Seminary	Conesus	El Reno Junior College	El Reno
Epiphany Apostolic College	Newburgh	Murray State Ag. Col.	Tishomingo
Eymard Preparatory Sem.	Hyde Park	Muskogee Junior College	Muskogee
Finch College	New York	Northeastern Okla. A & M Col.	Miami
Holy Cross Preparatory	Dunkirk	Northern Oklahoma Jr. Col.	Tonkawa
Junior College of Albany	Albany	Oklahoma Military Academy	Claremore
a Div. of Russell Sage Col.	Altamont	Poteau Community College	Poteau
La Salette Seminary	Albany	Sayre Junior College	Sayre
Mater Christi Seminary	Newburgh	Seminole Junior College	Seminole
Our Lady of Hope Mission Sem.	Brooklyn	Privately controlled	
Packer Collegiate Institute	Paul Smiths	Bacone College	Bacone
Paul Smith's College	Harriman	Central Christian College	Oklahoma City
Queen of the Apostles College	Williamsville	St. Gregory's College	Shawnee
Saint Clare College	Callicoon	OREGON	
Saint Joseph Seraphic Sem.	Buffalo	Publicly controlled	
Sancta Maria Jr. Col.	Chazy	Central Oregon College	Bend
William H. Miner, The Agricultural		Oregon Technical Institute	Klamath Falls
Research Institute		Privately controlled	
NORTH CAROLINA		Concordia College	Portland
Publicly controlled		Multnomah College	Portland
Asheville-Biltmore College	Asheville	PENNSYLVANIA	
Carver College	Charlotte	Publicly controlled	
Charlotte College	Charlotte	Hershey Junior College	Hershey
Gaston Technical Institute	Gastonia	Pennsylvania State University Centers	
Wilmington College	Wilmington	Allentown Center	Allentown
Privately controlled		Altoona Center	Altoona
Brevard College	Brevard	Behrend Campus	Erie
Campbell College	Buie's Creek	DuBois Campus	DuBois
Chowan College	Murfreesboro	Hazleton Campus	Hazleton
Gardner-Webb Jr. Col.	Boiling Springs	McKeesport Campus	McKeesport
Immanuel Lutheran College	Greensboro	New Castle Center	New Castle
Lees-McRae College	Banner Elk	New Kensington Center	New Kensington
Louisburg College	Louisburg	Ogontz Campus	Abington
Mars Hill College	Mars Hill	Pottsville Center	Pottsville
Mitchell College	Statesville	Scranton Center	Scranton
Mt. Olive Junior College	Mount Olive	Wilkes-Barre Center	Wilkes-Barre
Oak Ridge Military Institute	Oak Ridge	Wyomissing Center	Wyomissing
Peace College	Raleigh	York Campus	York
Pineland College and Edwards		Privately controlled	
Military Institute	Salemberg	Academy of the New Church	Bryn Athyn
Presbyterian Junior College	Maxton	Ambler Junior College	Ambler
Sacred Heart Junior College	Belmont	Community College of Temple Univ.	Philadelphia
St. Mary's Junior College	Raleigh	Eastern Pilgrim College	Allentown
Warren H. Wilson Junior Col.	Swannanoa	Franciscan Prep. Sem.	Holidaysburg
Wingate College	Wingate	Gwynedd-Mercy Jr. College	Gwynedd V.
NORTH DAKOTA		Harcum Junior College	Bryn Mawr
Publicly controlled		Johnstown Col. U. Pittsburgh	Johnstown
Bismarck Junior College	Bismarck	Keystone Junior College	La Plume
Devils Lake Junior College	Devils Lake		
North Dakota School of Forestry	Bottineau		
North Dakota State School of Science	Wahpeton		

Colleges

Institution	Location	Institution	Location
anna Junior College.....	Scranton	Tarleton State College.....	Stephenville
Junior College.....	Philadelphia	Temple Junior College.....	Temple
sius Junior College.....	Cresson	Texarkana College.....	Texarkana
e of St. Isaac Jogues.....	Wernersville	Texas Southmost College.....	Brownsville
ll Junior College.....	Chambersburg	Tyler Junior College.....	Tyler
arden Institute.....	Philadelphia	Victoria College, The.....	Victoria
st. of Temple Univ.....	Philadelphia	Weatherford College.....	Weatherford
orge Military Academy.....	Wayne	Wharton County Jr. Col.....	Wharton
ior College.....	York		
ISLAND		Privately controlled	
ely controlled		Allen Academy, The.....	Bryan
Williams Jr. College.....	Providence	Concordia College.....	Austin
CAROLINA		Decatur Baptist College.....	Decatur
ely controlled		Jacksonville College.....	Jacksonville
n College.....	Anderson	LeTourneau Tech. Inst. of Texas.....	Longview
Wesleyan College (formerly		Lon Morris College.....	Jacksonville
yan Methodist Col.).....	Central	Lubbock Christian College.....	Lubbock
Carolina Jr. Col.....	Conway	Schreiner Institute.....	Kerrville
ip Junior College.....	Rock Hill	South Texas Junior College.....	Houston
eenville Jr. College.....	Tigerville	S. W. Bible Inst. Jr. College.....	Waxahachie
y of Mercy Jr. Col.....	Charleston	Southwestern Junior College.....	Keene
n Methodist College.....	Aiken		
burg Junior College.....	Spartanburg	UTAH	
s School and Jr. Col.....	Denmark	Publicly controlled	
DAKOTA		Carbon College.....	Price
ely controlled		Dixie College.....	St. George
Junior College.....	Freeman	Snow College.....	Ephraim
tion Junior College.....	Aberdeen	Weber College.....	Ogden
on Springs College.....	Wessington Sps.		
ESSEE		VERMONT	
ely controlled		Privately controlled	
ardeman College.....	Henderson	Green Mountain College.....	Poultney
e College.....	Madisonville	Vermont College.....	Montpelier
ge.....	Cleveland		
College.....	Pulaski	VIRGINIA	
wn Normal and Industrial College	Morristown	Publicly controlled	
llege.....	Memphis	Clinch Valley College of Univ. of Virginia	Wise
		Danville Branch, Virginia Polytechnic	
ly controlled		Institute.....	Danville
ior College.....	Alvin	Norfolk Division of Virginia State College	Norfolk
College.....	Amarillo	William and Mary, College of, Norfolk	
n State College.....	Arlington	Division.....	Norfolk
llege.....	Brenham	Privately controlled	
ior College.....	Cisco	Averett College.....	Danville
n Junior College.....	Clarendon	Bluefield College.....	Bluefield
College.....	Corpus Christi	Ferrum Junior College.....	Ferrum
illips College.....	Borger	Frederick College.....	Portsmouth
le College.....	Gainesville	Marion College.....	Marion
Junior College.....	Wichita Falls	Marymount Junior College.....	Arlington
on County Jr. Col.....	Athens	Shenandoah College.....	Dayton
County Jr. Col.....	Big Spring	Southern Seminary and J. C.....	Buena Vista
Div. Pan Amer. Col.....	Edinburg	Stratford College.....	Danville
Div., Univ. of Houston.....	Houston	Sullins College.....	Bristol
College.....	Kilgore	Virginia Intermont College.....	Bristol
Junior College.....	Laredo	Virginia Theol. Sem. and Coll.....	Lynchburg
ge.....	Baytown		
Junior College.....	Corsicana	WASHINGTON	
College.....	Odessa	Publicly controlled	
College.....	Carthage	Centralia Junior College.....	Centralia
ior College.....	Paris	Clark College.....	Vancouver
College.....	Ranger	Columbia Basin College.....	Pasco
p's College.....	San Antonio	Everett Junior College.....	Everett
olo College.....	San Angelo	Grays Harbor College.....	Aberdeen
onio College.....	San Antonio	Lower Columbia Junior College.....	Longview
ains College.....	Levelland	Olympic College.....	Bremerton
st Texas Jr. Col.....	Uvalde	Skagit Valley College.....	Mt. Vernon
		Wenatchee Valley College.....	Wenatchee
		Yakima Valley Junior College.....	Yakima
		Privately controlled	
		Tacoma Catholic Junior College.....	Tacoma

Institution	Location	Institution	Location
WEST VIRGINIA		Sheboygan Cty. Teachers Coll.....	Sheboygan F
Publicly controlled		Taylor County Teachers College.....	Medford
Potomac St. Coll. of W. Va.....	Keyser	Vernon County Teachers College.....	Viroqua
Privately controlled		Univ. of Wisconsin, Ext. Div.....	Madison
Beckley College.....	Beckley	Green Bay Ext. Center.....	Green Bay
Greenbrier College.....	Lewisburg	Kenosha Ext. Center.....	Kenosha
WISCONSIN		Manitowoc Ext. Center.....	Manitowoc
Publicly controlled		Marathon County Center (formerly	
Ashland County Teachers Coll.....	Ashland	Wausau Center).....	Wausau
Barron County Teachers Coll.....	Rice Lake	Marinette Ext. Center.....	Marinette
Buffalo County Teachers Coll.....	Alma	Menasha Ext. Center.....	Menasha
Columbia City Teachers Coll.....	Columbus	Racine Ext. Center.....	Racine
Dodge County Teachers Coll.....	Mayville	Sheboygan Ext. Center.....	Sheboygan
Door-Kewaunee Cty. Teach. Coll.....	Algoma	Wood Cty. Teachers Coll.....	Wisc. Rapids
Green County Teachers College.....	Monroe	Privately controlled	
Juneau County Teachers College.....	New Lisbon	Concordia College.....	Milwaukee
Langlade County Teachers Coll.....	Antigo	Milwaukee Sch. of Engineering.....	Milwaukee
Lincoln County Teachers Coll.....	Merrill	St. Francis Minor Seminary.....	Milwaukee
Manitowoc County Teach. Coll.....	Manitowoc	St. Lawrence Seminary.....	Mt. Calvary
Marinette County Teachers Coll.....	Marinette	Salvatorian Seminary.....	St. Nazianz
Milwaukee Inst. of Tech.....	Milwaukee	WYOMING	
Outagamie County Teach. Coll.....	Kaukauna	Publicly controlled	
Polk County Teachers Coll.....	St. Croix Falls	Casper College.....	Casper
Racine-Kenosha Cty. Teach. Coll.....	Union Grove	Goshen Cty. Comm. College.....	Torrington
Richland County Teachers Coll.....	Richland Center	Northwest Comm. College.....	Powell
Sauk County Teachers College.....	Reedsburg	Sheridan College (formerly Northern	
		Wyoming Community College).....	Sheridan]

HEADLINE HISTORY OF OUR TIME

Based on Newspaper Accounts of Important Events

The Headline History is based on the date when historical events came to the knowledge of the public through the newspapers. The events themselves may have occurred at a different date. For events previous to Headline History, see Page 1 for Historical and News Events from Ancient to Modern Times. This is compiled by the Encyclopaedia Britannica staff, and it begins with the Battle of Actium in 31 B.C. It includes a chronology of World War I.

See also Conferences and Treaties, pages 532-534, and Postwar Decisions and Treaties, pages 529-531.

1917

Mar. 8—Russian Revolution begins.

Apr. 6—U. S. enters World War I.

1918

Jan. 8—Wilson's 14-point address to Congress calls for self-determination, removal of economic barriers, League of Nations.

July 16—Tsar Nicholas II and family shot.

Nov. 11—World War I ends.

1919

June 28—Versailles Treaty signed.

1920

Jan. 10—League of Nations officially inaugurated as Versailles Treaty goes into effect.

Jan. 16—Prohibition in U. S. goes into effect.

Mar. 19—Senate finally rejects Treaty of Versailles because of League of Nations proviso.

1922

Oct. 27—Mussolini marches on Rome.

1923

Nov. 8-9—Munich beer hall putsch by Hitler put down; Hitler sentenced to 5 years, serves less than 1; writes *Mein Kampf* in jail.

1925

July 10-21—Scopes evolution trial in Dayton, Tenn.

1927

May 20-21—Lindbergh flies solo across Atlantic.

Aug. 23—Sacco and Vanzetti executed.

Nov.—Trotsky expelled from Communist party.

. 24—Worst stock crash wipes out thousands of accounts.

t. 18-19—Explosion on Manchurian railway serves as pretext for Japan to begin occupation of Manchuria.

. 7—Stimson Doctrine: U. S. will not recognize gains achieved by armed force; recognition of Manchukuo withheld.

. 28—Japan begins invasion of international settlement of Shanghai.

e 7—Bonus March on Washington, D. C.

. 30—Hitler made Chancellor of Germany by Hindenburg.

. 5—Reichstag elections give Nazis and Nationalist allies 52% of vote.

. 6—Roosevelt proclaims bank holiday; embargoes gold.

. 12—FDR's first "Fireside Chat."

. 23—Reichstag gives Hitler blanket powers for 4 years; 94 Social Democrats opposed; many Social Democrats and all Communists under arrest or in hiding.

. 28—Nazis begin systematic boycott of Jewish businessmen, doctors, lawyers.

. 18—Tennessee Valley Authority (TVA) established.

e 16—National Industrial Recovery Act (NIRA) signed. Declared unconstitutional May 27, 1935.

. 5—Prohibition ends in U. S.

. 16—Hitler defies Versailles Treaty by re-establishing universal military training in Germany.

. 14—Social Security Act signed; establishes old-age benefits and unemployment insurance. Upheld by Supreme Court May 24, 1937.

. 20—Third International decides Russia will side with democracies against Fascist states.

t. 15—Nuremberg laws deprive Jews citizenship and bar intermarriage.

. 3—Italy invades Ethiopia.

. 7—League of Nations condemns Italy.

. 20—George V dies; Prince of Wales becomes Edward VIII.

. 7—Hitler sends German troops to Rhineland, defying Versailles Treaty; denounces Locarno Pact.

July 17—Spanish civil war begins; troops led by Gen. Francisco Franco revolt in Spanish Morocco; uprisings follow all over Spain.

Aug. 19-23—Zinoviev and Kamenev executed in Russia as collaborators with Trotsky and Nazi secret police.

Oct. 1—Franco named Chief of State by rebels; establishes capital at Burgos.

Oct. 27—Rome-Berlin Axis formed.

Nov. 18—Italy and Germany recognize Franco regime in Spain.

Nov. 25—Japan signs anti-Comintern treaty with Germany; Italy adheres Nov. 6, 1937.

Dec. 1-23—Buenos Aires conference: 21 American republics pledge to consult if peace is imperiled; no nation to interfere with another's domestic affairs.

Dec. 11—Edward VIII abdicates; his brother becomes George VI.

1937

June 12—Marshal Tukhachevsky and 7 generals executed in Russia for espionage and high treason.

1938

Sept. 29-30—Britain, France, Italy, Germany in parley at Munich agree to dismemberment of Czechoslovakia; Chamberlain returns to London with "peace in our time."

1939

Mar. 15—Hitler enters Prague.

Apr. 28—Hitler rebuffs FDR's peace plea in Polish quarrel.

Aug. 24—Germany and Russia sign 10-year nonaggression pact.

Sept. 1—Germany invades Poland and annexes Danzig; Britain and France give Hitler ultimatum.

Sept. 3—Britain and France declare war.

Sept. 28—Poland partitioned by Germany and Russia.

1940

May 10—Nazis invade Netherlands, Belgium, Luxembourg.

May 10—Chamberlain resigns as Prime Minister; Churchill takes over.

May 12—Germans cross French frontier.

May 26-June 3—Dunkerque evacuation: about 335,000 out of 400,000 Allied soldiers rescued from Belgium by civilian and naval craft from Britain.

June 10—Italy declares war on France and Britain; invades France.

June 14—Germans enter Paris; city undefended.

June 22—France and Germany sign armistice at Compiègne.

Nov. 14—Nazis bomb Coventry.

1941

- Apr. 17*—Yugoslavia surrenders; Gen. Mikhailović continues guerrilla warfare; Tito leads left-wing guerrillas.
- Apr. 27*—Nazi tanks enter Athens; remnants of British army quit Greece.
- June 22*—Hitler attacks Russia.
- Aug. 14*—Atlantic Charter: FDR and Churchill agree on war aims.
- Dec. 7*—Japan attacks Pearl Harbor, Philippines, Guam, forcing U. S. into war Dec. 8; Pacific Fleet crippled.
- Dec. 8*—U. S. and Britain declare war on Japan.
- Dec. 11*—Germany and Italy declare war on U. S.; Congress declares war on those countries.

1942

- Feb. 15*—British surrender Singapore.
- Apr. 9*—U. S. forces on Bataan surrender.
- Nov. 8*—U. S. and Britain land great army in French North Africa.

1943

- Jan. 14-24*—Casablanca Conference: Churchill and FDR agree on unconditional-surrender goal.
- Feb. 1-2*—German 6th Army surrenders at Stalingrad; turning point of war in Russia.
- May 12*—Remnants of Nazis trapped on Cape Bon, ending war in Africa.
- June 10*—FDR signs withholding tax.
- July 25*—Mussolini deposed; Badoglio is Premier.
- Sept. 3*—Allied troops land on Italian mainland.
- Sept. 8*—Italy surrenders.
- Sept. 10*—Nazis seize Rome.
- Nov. 22-26*—Cairo Conference: FDR, Churchill, Chiang-Kai-shek pledge defeat of Japan, free Korea.
- Nov. 28-Dec. 1*—Teheran Conference: FDR, Churchill, Stalin agree on invasion plans.

1944

- June 6*—D-Day: Allies launch Normandy invasion.
- July 20*—Hitler wounded in bomb plot.
- Aug. 25*—Paris liberated.
- Oct. 20*—Americans invade Philippines.
- Dec. 16*—Germans launch counteroffensive in Belgium (Battle of Bulge).

1945

- Feb. 11*—Yalta Agreement signed by FDR, Churchill and Stalin.
- Apr. 12*—FDR dies; Truman is President.

May 1—Adm. Doenitz takes command of Germany; death of Hitler announced.

May 2—Berlin falls.

May 7—V-E Day: Germany signs conditional surrender terms at Reims.

July 17-Aug. 2—Potsdam Conference: Truman, Churchill (Attlee after July 28), Stalin establish council of foreign ministers to prepare peace treaties; plan German postwar government and reparations.

Aug. 6—A-bomb blasts Hiroshima.

Aug. 8—Russia declares war on Japan.

Aug. 9—Nagasaki hit by A-bomb.

Aug. 14—Japan surrenders.

Sept. 2—Japanese sign surrender treaty aboard battleship *Missouri* (V-J Day).

Oct. 24—U. N. officially established.

Nov. 15—Truman, Attlee and Mackenzie King decide in Washington Conference that A-bomb secrets will be shared until U. N. adopts control plan.

Dec. 27—Moscow Conference, attended by Byrnes, Molotov and Bevin, make preliminary plans for atomic-energy control, peace treaties and Korea.

1946

- Jan. 10*—1st meeting of U. N. General Assembly opens in London.
- Apr. 8-18*—Final Assembly session: Geneva dissolves League of Nations.
- Apr. 29*—U. S. proposes treaty with Britain, Russia and France to disarm Germany 25 years; British cool to idea.
- May 31*—U. S. and Britain demand elections in Rumania.
- Oct. 1*—Verdict in Nuremberg war trials: 12 Nazi leaders (including 1 tried in absentia) sentenced to hang; 7 prisoned; 3 acquitted.
- Oct. 15*—Goering commits suicide a few hours before 10 other Nazis are executed Oct. 16.

1947

- Jan. 28*—U. S. rebukes Polish Communists for rigging election.
- Feb. 10*—Peace treaties for Italy, Rumania, Bulgaria, Hungary, Finland signed in Paris.
- Mar. 4*—Russia rejects U. S. plan for U. N. atomic-energy control.
- Mar. 12*—Truman asks Congress for \$400 million to save Greece and Turkey from Communist expansion (Truman Doctrine).
- July 12-15*—16 nations meet in Paris to study Marshall Plan (Russia and others stay away).
- Aug. 1*—Security Council calls on Dutch and Indonesians to cease hostilities.
- Aug. 15*—India freed by Britain.

ne History

t. 5—Moscow announces formation of new 9-nation Communist Information Bureau (Cominform).

v. 14—General Assembly votes commission to set up free government for all of Korea.

n. 17—U. N. Good Offices Commission effects truce in Indonesia.

n. 30—Gandhi assassinated.

b. 23-25—Communists seize power in Czechoslovakia.

r. 21—Security Council votes plebiscite in Kashmir to decide whether province goes to India or Pakistan; both sides object.

ty 14—Nation of Israel proclaimed; British end mandate at midnight; Arab armies attack.

ne 11—U. N. appeal brings temporary truce in Palestine.

ne 18—Russia stops traffic between Berlin and Western occupation zones in Germany.

ne 21—Berlin airlift begins; ends May 12, 1949.

ne 22—Russian veto prevents Security Council from approving atomic-control plan favored by majority.

ne 28—Stalin and Tito break.

g. 15—Independent Republic of Korea is proclaimed, following election supervised by U. N.

v. 4—General Assembly approves U. S.-sponsored atomic control plan.

v. 12—Verdict in Japanese war trial: Tojo and 6 others sentenced to hang (hanged Dec. 23); 18 imprisoned.

n. 7—Cease-fire in Palestine.

p. 20—Truman proposes Point 4 Program to help world's backward areas.

b. 8—Cardinal Mindszenty sentenced in Hungary to life imprisonment.

b. 24—Israel signs armistice with Egypt.

r. 4—Start of NATO; treaty signed by 12 nations.

y 11—U. N. admits Israel.

pt. 21—German Federal Republic (West Germany) established.

pt. 24—Truman discloses Russia has set off atomic explosion.

n. 13—Russia boycotts Security Council (until Aug. 1) because Red China was refused admittance to U. N.

n. 31—Truman orders development of hydrogen bomb.

June 25—North Koreans cross 38th parallel to invade South Korea.

June 27—Truman orders U. S. air and sea aid to South Koreans.

June 27—Security Council (at that time boycotted by Russia) calls on U. N. members to help repel North Korean aggression.

Oct. 7—U. S. 1st Cavalry makes 1st U. S. crossing of 38th parallel.

Nov. 20—U. S. 7th Division unit reaches Manchurian border.

1951

Feb. 1—General Assembly condemns (44-7) Red China as an aggressor.

Mar. 19—6 nations initial Schuman Plan to pool European coal and steel market. (In effect Feb. 10, 1953.)

Apr. 11—Truman removes MacArthur from all commands.

June 23—Russia proposes truce.

July 10—Truce talks begin in Korea.

Sept. 8—Japanese peace treaty signed in San Francisco by 49 nations.

1952

Feb. 6—George VI dies; his daughter becomes Elizabeth II.

Feb. 20-25—NATO conference approves European Army; sets goal of 50 divisions and 4,000 planes by end of 1952.

May 26—Western Allies and West Germany sign peace contract at Bonn.

1953

Mar. 5—Stalin dies.

Mar. 6—Malenkov becomes Soviet Premier; Beria is Minister of Interior; Molotov is Foreign Minister.

Apr. 10—Dag Hammarskjöld begins term as U. N. Secretary General.

June 8—Agreement on POWs reached at Panmunjom; India to head 5-nation commission for custodianship of POWs refusing repatriation.

June 17—East Berliners rise against Communist rule; quelled by tanks.

June 18-21—Pres. Rhee frees 27,000 anti-Red POWs in defiance of U. N.-Red prisoner agreement; truce talks halted June 20.

July 10—Truce talks are resumed.

July 27—Korean armistice signed.

Aug. 20—Moscow announces explosion of hydrogen bomb.

1954

Jan. 21—1st atomic-powered submarine, *Nautilus*, launched at Groton, Conn.

Jan. 26—U. S. Senate ratifies (81-6) mutual security treaty with Republic of Korea.

May 7—Dienbienphu falls to Indo-China Red rebels.

July 21—Indo-China truce signed at Geneva conference; Reds get half of Vietnam.

Sept. 6—Eisenhower launches world atomic pool without Russia.

Sept. 8—8-nation Southeast Asia defense treaty signed at Manila.

Oct. 23—West Germany is granted sovereignty and is admitted to NATO and Western European Union.

1955

Jan. 17—Submarine *Nautilus* goes to sea under atomic power.

Apr. 5—Churchill resigns; Eden succeeds him Apr. 6.

Apr. 12—Scientists OK Salk vaccine.

May 31—Supreme Court leaves school desegregation to regional Federal courts.

July 16—Hungary releases Cardinal Mindszenty. (See Feb. 8, 1949.)

Sept. 19—Argentina ousts Perón.

Sept. 24—Pres. Eisenhower suffers coronary thrombosis in Denver.

Sept. 27—Egypt to buy Soviet arms.

1956

Feb. 22—U. S. releases 40,000 kg. of Uranium 235 (worth \$1 million) for peaceful atomic power at home and abroad.

Mar. 9—Archbishop Makarios of Cyprus is sent into exile by Britain.

Mar. 20—Khrushchev calls Stalin murderer. (Speech made Feb. 24.)

Apr. 7—Spain proclaims Spanish Morocco independent after 44 years.

May 21—First aerial H-bomb tested over Namu I., Bikini Atoll (10-million tons TNT equivalent).

June 9—Eisenhower undergoes operation to relieve blockage of small intestine due to ileitis; physicians say he will be physically fit to run for reelection.

June 12—Scientists report radiation is peril to future of race.

June 28-30—Workers' uprising against Communist rule in Poznan, Poland is crushed by tanks.

July 19—U. S. withdraws its offer to help Egypt build Aswan dam on Nile.

July 26—Egypt announces seizure of Suez Canal control.

Sept. 29—France and Germany agree that the Saar will return to Germany Jan. 1.

Oct. 19—Japan and Russia sign agreement ending technical state of war.

Oct. 21—Polish Communists replace Wladyslaw Gomulka to power, party First Secretary.

Oct. 24—Soviet troops and tanks Hungary fight anti-Communist rebellion, Imre Nagy is new premier.

Oct. 26—82 nations agree at U. N. new International Atomic Energy Agency for peaceful use of atom. offers it 11,000 lb. of Uranium 235.

Oct. 29—Israel launches attack Egypt's Sinai Peninsula and drive toward Suez Canal.

Oct. 31—British air attacks begin Egypt.

Nov. 4—U. N. votes to organize its peace force to restore peace to Egypt.

Nov. 5—British and French invade Egypt at Port Said.

Nov. 6—British, French cease fire at Port Said and halt Suez advance.

Nov. 23—Russians kidnap Hungarian Premier Imre Nagy and replace with Janos Kadar.

Dec. 12—U. N. General Assembly condemns Russia for aggression in Hungary. Vote: 55 yes, 8 no, with 13 abstaining.

Dec. 22—Anglo-French forces withdraw from Egypt.

1957

Jan. 5—Eisenhower asks special session of Congress for power to increase military and economic aid in Middle East—Eisenhower Doctrine.

Jan. 9—Prime Minister Anthony Eden resigns after only 21 months in office, succeeded by Harold Macmillan, Chancellor of Exchequer, on Jan. 10.

Mar. 5—Eisenhower Doctrine for Middle East passes Senate, 72-19; House approves Congressional approval, 350-10 on Mar. 7.

Mar. 6—New nation, Ghana, formerly British colony in Africa known as Gold Coast, attains full independence.

June 24—Scientists tell Eisenhower now can produce nuclear weapons 95% free of radioactivity.

Aug. 31—Federation of Malaya achieves independence as newest free nation in world.

Sept. 24—Eisenhower sends Army troops to Little Rock, Ark., to quell mob violence and protect school integration.

Nov. 3—Soviet Russia launches satellite with dog in it.

Nov. 26—Eisenhower suffers stroke.

- 31—Army's Jupiter-C rocket fires first U. S. earth satellite, Explorer I, to orbit.
- 1—Egypt and Syria merge into one nation—United Arab Republic.
- 27—Khrushchev becomes Premier of Soviet Union as Bulganin resigns.
- 31—Soviet government announces suspension of nuclear-weapons tests; demands U. S. and Britain also stop.
- 1—French National Assembly votes in Gen. Charles de Gaulle as premier by 329-224.
- 30—Congress votes Alaska into Union as 49th state.
- 14—Pro-Nasser army officers shoot King Faisal of Iraq and seize rule, proclaiming republic.
- 15—Eisenhower orders U. S. Marines into Lebanon at request of Pres. Chamoun, who fears overthrow.
- 8—U. S. atomic submarine *Nauutilus* crosses top of world under North pole.
- 22—Eisenhower offers 1-year suspension of U. S. nuclear-arms tests.
- 12—U. S. Supreme Court orders immediate racial integration in Little Rock high school; Gov. Faubus orders all 4 high schools closed.
- 22—Sherman Adams resigns as Assistant to President, denying any wrongdoing.
- 9—Pope Pius XII dies at 82.
- 28—Cardinal Roncalli becomes Pope John XXIII.
- 4—Democrats substantially increase their control of both houses of Congress.
- 1—Fire kills 91 in Our Lady of the Angels School, Chicago.
- 18—U. S. puts 5th earth satellite into orbit with 8,700-lb. Atlas missile.
- 1—President Batista resigns and leaves Cuba. Castro's revolt wins.
- 8—De Gaulle takes office as President of France for 7 years.
- 2—Negroes admitted to formerly white schools in Norfolk and Arlington, Va.
- 11—Greece and Turkey agree on independence for Cyprus after long dispute.
- 27—Dave Beck, former boss of Teamsters' Union, sentenced to 5 years in prison, fined \$60,000 for income tax evasion.
- 12—Congress votes admission of Hawaii as 50th state.
- Apr. 2—Tibet's Dalai Lama escapes into India.
- Apr. 9—U. S. picks 7 spacemen; one will go into orbit in 1961.
- Apr. 12—U. S. proposes ban on nuclear explosion tests except underground or over 30 miles up.
- Apr. 18—Christian A. Herter named Secretary of State to succeed cancer-stricken John Foster Dulles, who resigned.
- Apr. 25—St. Lawrence Seaway opens, allowing ocean ships to go into Midwest.
- June 23—British set atom spy Klaus Fuchs free after 9 years in prison and put him on plane for East Germany.
- July 5—France gives Saar completely back to Germany, ending economic controls.
- July 15—Nation-wide steel strike begins, with 500,000 steel workers out.
- July 21—Post Office ban on *Lady Chatterley's Lover* voided by U. S. Federal judge.
- July 24—Vice President Nixon, in Moscow to open U. S. exhibition, engages in public argument with Khrushchev at fair.
- Aug. 12—Little Rock public high schools reopen at court order, admitting 5 Negroes; police use clubs on protesting mob.
- Aug. 17—AFL-CIO votes to readmit 60,000 member International Longshoremen's Assn. after 6-year expulsion for corruption.
- Sept. 14—Soviet rocket hits moon in 35-hour trip over 236,875 miles.
- Sept. 16—Pres. de Gaulle tells Algeria it can vote on its destiny 4 years after rebellion ceases.
- Sept. 18—Khrushchev, speaking to U.N. General Assembly, asks disarmament of all nations within 4 years.
- Oct. 6—Congressional probe of TV quiz shows hears "21" fed answers to contestants.
- Oct. 19—Eisenhower invokes Taft-Hartley law to halt for 80 days longest steel strike of 90 days.
- Nov. 2—Charles Van Doren confesses fake on TV "21".
- Nov. 7—Supreme Court upholds Taft-Hartley law injunction halting 116-day steel strike for 80 days.
- Nov. 25—Catholics oppose U. S. aid funds for birth control.
- Dec. 3—Eisenhower flies to Europe, Asia, Africa on 11-nation goodwill trip.
- Dec. 19—Western Big Four open summit talk in Paris in preparation for spring conference with Soviet Union.
- Dec. 26—Gov. Nelson A. Rockefeller withdraws from Republican Presidential race.

(For 1960, see front of book.)

HISTORICAL AND NEWS EVENTS

FROM ANCIENT TO MODERN TIMES

(See also our section entitled *Headline History of Our Times*)

- Actium, Battle of** (31 B.C.). Octavius defeats Mark Anthony.
- Alexander the Great** conquers Greece, Persia, Egypt and part of India (334-323 B.C.). Major battles: Granicus (334 B.C.), Issus (333), Arbela (331).
- American Revolution** (1775-83). Outstanding events: 1775—Battle of Lexington-Concord (Apr. 19). Battle of Bunker Hill (June 17). 1776—Battle of Long Island (Aug. 27). 1777—Burgoyne surrenders at Saratoga (Oct. 17). 1781—Battle of Cowpens (Jan. 17). Battle of Yorktown (Sept. 28-Oct. 19), and British surrender by Cornwallis. 1783—Treaty signed by U. S. and Britain (Sept. 3).
- "Babylonian Captivity"** of Papacy with seat at Avignon (1309-77).
- Bacon's Rebellion** (May 10-Oct. 18, 1676). Nathaniel Bacon leads unsuccessful insurrection in Virginia because of abuses in government administration and taxation.
- Balfour Declaration** (Nov. 2, 1917) promises Jewish homeland in Palestine.
- Balkan Wars** (1912-13). Bulgaria, Serbia, Greece and Montenegro defeat Turkey; later, Bulgaria attacks Serbia and Greece and is defeated.
- Bastille** destroyed (July 14, 1789).
- Benedictine Order** founded at Monte Cassino (c. A.D. 529).
- Bible** translated by Wycliffe into English (1382-84); Douay Version published (1582 & 1609-10); King James Version published (1611).
- Black Death** (beginning c. 1347) wipes out at least one-quarter of population of Europe.
- Black Friday** (Sept. 24, 1869). Financial panic results from gold corner in U. S.
- Boer War** (1899-1902). Boers defeated by British; sign peace treaty at Pretoria (May 31, 1902).
- Boston Massacre** (Mar. 5, 1770). British soldiers fire on Boston mob, killing 3.
- Boston Tea Party** (Dec. 16, 1773). Colonials dump tea in Boston Harbor because of tea tax.
- Boxer Rebellion** (1900). Uprising by secret society in northern China against foreigners.
- Brown, John**, and 18 followers raid Harpers Ferry (Oct. 16, 1859) and seize arsenal; taken prisoners by U. S. Marines (Oct. 18); Brown hanged (Dec. 2).
- Burr-Hamilton** duel. See Hamilton.
- Cape-to-Cairo Railroad** completed (1906).
- Carthage** founded by Phoenicians (c. 800 B.C.); destroyed by Romans (146 B.C.).
- Châlons, Battle of** (A.D. 451). Attila the Hun defeated by Romans.
- Charlemagne** crowned Emperor of the West (A.D. 800).
- Charles I** beheaded (Jan. 30, 1649). Also Great Rebellion.
- Children's Crusade** (1212). About 500,000 unarmed children set out to recapture Holy Sepulchre; all lost or die on way.
- Chinese-Japanese War** (1894-95). Japan wins Formosa, Pescadores and part of southern Manchuria; Korea becomes independent (annexed by Japan 1910).
- Christianity** made official religion of Roman Empire (A.D. 380).
- Civil War, American** (1861-65). Outstanding events: 1861—First Battle of Bull Run (July 21). 1862—*Monitor* defeats *Merrimack* (Mar. 9). Battle of Antietam (Sept. 15-17). 1863—Lincoln's Emancipation Proclamation (Jan. 1). Battle of Gettysburg (July 1-3). Grant captures Vicksburg (July 4). Battle of Lookout Mountain (Nov. 23-25). 1864—Battle of the Wilderness (May 5-6). Sherman's March through Georgia (Nov. 14-22). 1865—Lee surrenders at Appomattox (Apr. 9).
- Code Napoléon**, unified codification of French law, adopted (1804).
- Code of Hammurabi** (c. 2300 B.C.). One of the earliest written codes of laws.
- Communist Manifesto** issued by Karl Marx and Friedrich Engels (1848).
- Compromise of 1850** admits California as free state; organizes Utah and New Mexico as territories without mention of slavery; prohibits slave trade to D. C.; returns fugitive slaves to owners; pays Texas \$10 million for claim to New Mexico.
- Confederacy** proclaimed by seceding states (Feb. 9, 1861); Jefferson Davis named President.
- Congress of Vienna** (1814-15). European powers, under leadership of Metternich, meet to settle problems of territory and government resulting from Napoleonic Wars.
- Constantinople** founded (as Byzantium) by Greeks (c. 660 B.C.); made capital of Eastern Roman Empire by Constantine the Great (A.D. 330); captured

ks (1453); renamed Istanbul (1930).
 I of Nicaea (A.D. 325). Called by
 stantine the Great; establishes
 ial creed of Christianity (Nicene
 ed).
 l of Trent (1545-64). Called by Pope
 III, at suggestion of Emperor
 rles V, to establish Catholic Coun-
 Reformation.
 's Army" (March. 25-May 1, 1894).
 b S. Coxey leads 20,000 unemployed
 Washington, D. C.
 n War (1853-56). Russia loses claim
 reek Christians under Turkish flag.
 ion of Christ (c. A.D. 29). Accord-
 to New Testament, Christ rose from
 dead 2 days later.
 es (1096-1291). European Christians,
 periods of conflict, attempt to re-
 er Holy Land from Moslems. *See also*
 dren's Crusade.
 massacre (June 25, 1876). Gen.
 rge A. Custer and his forces killed
 battle of Little Big Horn by Sioux.
 Comedy begun by Dante (1307);
 ably finished in last year of his
 (1321).
 can Order founded (1215).
 ebellion (1841-42). Thomas W. Dorr
 unsuccessful attempt to extend
 chise in Rhode Island; franchise
 ended 1843.
 cott case (1846). Dred Scott, Negro
 e, sues for freedom on claim he has
 for a time on free soil; U. S. Su-
 ne Court rules (Mar. 6, 1857) that
 t is not a citizen and has no stand-
 in court.
 case (1894). Capt. Alfred Dreyfus
 d guilty of treason in France and
 ended to Devil's Island. Finally ac-
 ted (1906).
 ebellion (April. 24, 1916). Irish
 onalists unsuccessfully attempt to
 w off British rule.
 f Nantes (1598). Extends tolera-
 to Huguenots (French Protes-
 s); its revocation (1685) causes
 spread persecution of Huguenots.
 on trial. *See* Scopes.
 Guy. *See* Gunpowder Plot.
 sm, lord-vassal social system, es-
 shed throughout Europe (9th cen-
); begins to break up (14th-15th
 uries).
 can Order founded (1210).
 Prussian War (1870-71). France
 ated by German states; loses
 ce-Lorraine.
 a of press established in America
 ohn Peter Zenger, New York editor,

is acquitted in libel case against Gov.
 Cosby (1735).

French and Indian War. *See* Seven Years'
 War.

French Revolution (1789-99). Outstanding
 events: 1789—Bastille destroyed (July
 14). Feudal rights abolished (Aug. 4).
 1792—September Massacres (Sept. 2-6).
 France becomes republic (Sept. 21).
 1793—Louis XVI beheaded (Jan. 21);
 Marie Antoinette beheaded (Oct. 16).
 Reign of Terror (spring 1793-summer
 1794). 1795—Napoleon heads army. Di-
 rectory established (Oct. 27). (Revolu-
 tion merges into Napoleonic Wars.)

Gold rush develops as gold is discovered
 at Sutter's Mill, near Sacramento, Calif.
 (Jan. 2, 1848).

Great Rebellion (1642-49). Civil wars in
 England. Charles I beheaded (Jan. 30,
 1649); Cromwell establishes Common-
 wealth (1649).

Great Wall of China begun (255 B.C.).

Gregorian Calendar replaces Julian Calen-
 dar in Catholic countries (1582), in
 Britain and her Colonies (1752), in
 Russia (1918).

Gunpowder Plot (1605). Guy Fawkes,
 agent of conspirators against King and
 Parliament, seized as he is about to
 blow up House of Lords (Nov. 5).

Hamilton-Burr duel (July 11, 1804) results
 in Hamilton's death next day.

Hastings, Battle of (1066). Normans led by
 William the Conqueror invade England.

Hegira (A.D. 622). Mohammed flees from
 Mecca to Medina. Year I of Moslem
 calendar.

Holy Alliance formed by Russia, Austria
 and Prussia (Sept. 26, 1815); intended
 to regulate government according to
 Christianity but actually used for re-
 pressing political liberty.

Holy Roman Empire founded by Otto the
 Great (962); dissolved by Napoleon
 (1805).

Huguenots. *See* Edict of Nantes; St. Bar-
 tholomew Massacre.

Hundred Years' War (1338-1453). England
 loses lands in France. Major battles:
 Crécy (1346), Poitiers (1356), Agincourt
 (1415).

Industrial Revolution begins in England
 (c. 1760). Machines gradually replace
 hand tools, bringing about vast indus-
 trial and social changes.

Inquisition established (c. 1233) to com-
 bat heresy; put under state control
 in Spain (1480); abolished in France
 (1772), in Spain (1834).

International, First (1864). Founded in
 London to further world socialism; dis-
 solved in Philadelphia (1876).

International, Second (1889). Founded in Paris to celebrate 100th anniversary of French Revolution.

International, Third (1919). Founded in Moscow as protest against inactivity of Second International; dissolved (1943). Also called *Communist International* or *Comintern*.

Jamestown, Va., settled by British under Capt. John Smith (1607).

Jerusalem destroyed by Nebuchadnezzar (586 B.C.); returned to Jews by Cyrus (538 B.C.); captured by Titus (A.D. 70); captured by Crusaders (1099); captured by Saladin (1187).

Jesuits (Society of Jesus) founded by Ignatius of Loyola (1534).

Joan of Arc burned at stake (1431).

Justinian Code (A.D. 529). Codification of Roman law by Byzantine Emperor Justinian.

Kansas-Nebraska Act (1854) abrogates Missouri Compromise; permits territories of Kansas and Nebraska local option on slavery question; results in rioting and bloodshed.

Leopold-Loeb case (1924). Nathan Leopold and Richard Loeb kidnap and kill Bobby Franks in Chicago (May 22); sentenced to life imprisonment (July 21); Loeb killed by fellow convict (Jan. 28, 1936); Leopold receives parole (Feb. 20, 1958).

Lindbergh flight (May 20-21, 1927). Charles A. Lindbergh makes first solo flight across Atlantic.

Locarno Conferences (Oct. 1925) seek to insure peace and preserve boundaries in Europe by mutual guarantees.

Louis XVI beheaded (Jan. 21, 1793). *See also* French Revolution.

Magna Carta, charter listing rights and privileges of English barons, proclaimed at Runnymede (June 15, 1215); King John forced by barons to accept it.

Manhattan Island purchased by Peter Minuit from Indians (1626) for trinkets worth 60 guilders (about \$24).

Mary, Queen of Scots, convicted in England (1586) of being accomplice in plot to murder Queen Elizabeth; beheaded (Feb. 8, 1587).

Maximilian, Emperor of Mexico, executed by Benito Juárez (June 19, 1867) after Napoleon III of France withdraws support of Mexican empire.

Merrimac. *See* Monitor.

Mexican War (1846-1848) ends in American victory; Treaty of Guadalupe Hidalgo signed (1848).

Ming Dynasty (1368-1644). Noted for great development of culture and art in China.

Missouri Compromise (1820) admits Missouri as free state, Missouri as slave state; slavery prohibited in Louisiana Territory north of 36° 30'. *See also* Kansas-Nebraska Act.

Monitor, Union ship, defeats Merrimack, Confederate ship (Mar. 9, 1862).

Mooney, Tom, sentenced to death for bomb explosion in San Francisco during Preparedness Day Parade (1916); sentence commuted to life (1936); freed (1939).

Mormonism (Church of Jesus Christ of Latter-day Saints) founded by Joseph Smith at Fayette, N. Y. (Apr. 6, 1830).

Moses leads Jews out of Egypt (c. 1300 B.C.).

Napoleonic Wars (1796-1815). Outstanding events: 1798—Campaign in Egypt. 1805—Nelson defeats French at Battle of Trafalgar (Oct. 21). French defeat Prussians and Austrians at Battle of Jena-Auerstedt (Oct. 14). 1806—French defeat Prussians at Battle of Jena. 1807—French defeat Prussians at Battle of Tilsit. 1812—French defeat Prussians at Battle of Leipzig (Oct. 16-19). 1814—Napoleon abdicates (Apr. 11); sent to Elba. 1815—Napoleon flees Elba (June 26). Napoleon defeated in Battle of Waterloo (June 18). *See also* Congress of Vienna.

Northwest Ordinance (1787). Adopted by Congress; establishes method for admitting new states; prohibits slavery in territory.

Orthodox Eastern Church excommunicated by Pope Leo IX (1054); schism between Western and Eastern Churches.

Parliament established in England (13th century).

Peloponnesian War (431-404 B.C.). Sparta under Lysander defeats Athens.

Persian Wars (499-478 B.C.). Greece defeats Persia. Major battles: Marathon (490 B.C.), Thermopylae (480), Salamis (480), Plataea (479), Mycale (479).

Pilgrims land at Plymouth Rock (Dec. 1620).

Plague in London ("Great Plague") causes 68,596 deaths (1665).

Plymouth Rock. *See* Pilgrims.

Poland partitioned out of existence among Prussia, Russia and Austria (1772, 1793, 1795).

Pony Express (1860-61). Between St. Joseph, Mo., and Sacramento, Calif.

Pullman strike (June-July 1894). Strikers smashed by Federal troops; Eugene V. Debs jailed for contempt.

Punic Wars (264-146 B.C.). Romans defeat Carthaginians and destroy Carthage (146 B.C.). Major battles: Cannae (216 B.C.), Zama (202).

Rasputin ("Black Monk"), confessor to Tsarina, murdered (Dec. 31, 1916).

ation (beginning 16th century). Outstanding events: Luther nails his theses to church door at Wittenberg, many (1517). Zwingli begins Reformation in Switzerland (1519). Luther issues papal bull and canon law (1520). Luther publishes *Institutes of the Christian Religion* (1536). Act of Supremacy makes King head of Church of England (1534). Calvin organizes Geneva as theocratic state (1541). Knox establishes Presbyterian Church in Scotland (1560). Renaissance (14th-16th centuries). Revival of classical learning in Europe stimulates vigorous activity in arts, literature, humanities, etc.

Roman Empire established under Augustus (27 B.C.); divided into Western and Eastern Empires (A.D. 395); Western Empire falls (476); Eastern Empire falls with capture of Constantinople (539).

Rome founded, according to legend, by Romulus (753 B.C.); burned, perhaps by Nero (A.D. 64); sacked by Visigoths under Alaric (410); sacked by Vandals under Genseric (455).

Japanese War (1904-05). Port Arthur falls to Japanese (Jan. 2, 1905); Treaty of Portsmouth, N. H. (Sept. 5).

Turkish War (1877-78). Power of Turkey in Europe broken; redrawing of southeastern Europe at Congress of Berlin (June 13-July 13, 1878).

St. Bartholomew, Massacre of (Aug. 24-25, 1572). Some 50,000 Huguenots (French Protestants) killed in Paris provinces at instigation of Catherine de Medici.

St. Valentine's Day Massacre in Chicago (Feb. 14, 1929). 6 members of Moran gang lined up against wall by rival gang and shot.

St. John, Florentine priest and dictator, executed for sedition and heresy (1498); body burned (May 23).

Scopes Evolution Trial held at Dayton, Tenn. (July 10-21, 1925). John T. Scopes indicted by William Jennings Bryan for teaching evolution in Tennessee school; defended by Clarence Darrow. Scopes convicted but decision later set aside.

Seven Years' War (1756-63). France, Austria, Sweden, Russia vs. England and Prussia. Clive defeats French at Battle of Plassey (1757), giving British suzerainty in India; England wins Canadian War; Prussia retains Silesia. (American Revolution of war known as French and Indian War, 1754-63.)

Shays' Rebellion (1786). Capt. Daniel Shays leads unsuccessful insurrection against Massachusetts government because of economic crisis.

Slavery in British Empire abolished by Parliament (1833).

Slavery introduced into American Colonies at Jamestown, Va. (1619); abolished in U. S. by 13th Amendment (1865).

Snyder-Gray case (1927). Ruth Snyder and Judd Gray murder her husband, Albert Snyder (Mar. 20); both executed at Sing Sing (Jan. 12, 1928).

Spanish-American War (1898). Outstanding events: U. S. battleship *Maine* blown up in Havana harbor (Feb. 15). Dewey destroys Spanish fleet at Manila (May 1). Charge of San Juan Hill (July 1). Cervera's fleet destroyed off Santiago, Cuba, by U. S. ships (July 3). Treaty of Paris (Dec. 10).

Spanish Armada destroyed by British (1588).

Spartacus, Roman slave and gladiator, leads unsuccessful slave insurrection (73-71 B.C.).

Stamp Act (effective Nov. 1, 1765). First direct tax placed on America by Britain; protested by Stamp Act Congress in New York (Oct. 7-25); repealed by Britain (Mar. 18, 1766).

Texan war of independence from Mexico (1836). Major battles: Alamo (Mar. 6), San Jacinto (Apr. 21).

Thaw-White case (1906). Harry K. Thaw, millionaire, murders Stanford White, noted architect, in Madison Square Garden (June 25).

Thirty Years' War (1618-1648). England, Holland, France, Sweden and German Protestants against Spain, Italy and German Catholics; Peace of Westphalia ends conflict, Alsace going to France, Swiss independence recognized, and German secularized states given religious freedom.

Tours, Battle of (A.D. 732). Charles Martel defeats Moslems, checking their advance in western Europe. Also called Battle of Poitiers.

Trojan War (c. 1200 B.C.). Greeks defeat Trojans; destroy city of Troy.

Tutankhamen's tomb discovered near Luxor by Lord Carnarvon and Howard Carter (1922).

Tweed Ring, corrupt New York political group headed by Wm. Marcy Tweed, Tammany Boss, broken up (1872); Tweed convicted (Nov. 5).

War of 1812 (1812-1815). Outstanding events: 1813—Battle of Lake Erie (Sept. 10). 1814—British burn White House at Washington (Aug. 24-25). Battle of Lake Champlain (Sept. 11). U. S. signs treaty with Britain at Ghent (Dec. 24). 1815—Battle of New Orleans (Jan. 8). (Slowness of commu-

nications was responsible for continuation of hostilities after treaty.)

Wars of the Roses (1455-85). House of York (white rose) against House of Lancaster (red rose). Richard III slain at Battle of Bosworth Field (1485); Tudor line started by Henry VII.

Whisky Insurrection (July-Nov. 1794). Farmers in western Pennsylvania revolt unsuccessfully against excise tax of 1791.

Witch trials in Salem, Mass., result in death sentences for 19 women by Judge Samuel Sewall (1692).

Woman suffrage first granted in U. S. by Wyoming Territory (1869).

World War I (1914-18). Central Powers (Austria-Hungary, Germany, Bulgaria, Turkey) vs. Allies (U. S., Britain, France, Russia, Belgium, Serbia, Greece, Rumania, Montenegro, Portugal, Italy, Japan). Outstanding events: 1914—Austria declares war on Serbia (July 28). Germany declares war on Russia

(Aug. 1) and on France (Aug. 3). Many invades Belgium (Aug. 4). Britain declares war on Germany (Aug. 4). Germans defeat Russians at Tannenberg, East Prussia (Aug. 31). Battle of the Marne (Sept. 5-12). Dardanelles campaign against Turkey fails. 1916—Battle of Jutland (May). Battles of the Somme (July-Nov.). Germans turned back at Verdun (Dec. 3). Rumania overrun by Central Powers; fall of Bucharest (Dec. 6). 1917—Germany begins unrestricted submarine warfare. U. S. declares war (Apr. 6). Battle of Caporetto (Oct. 24-26). 1918—Second Battle of the Marne (Aug. 21-Sept. 3). Third Battle of the Aisne (May 27-June 6). Second Battle of the Marne (July 15-Aug. 7). Allies take St. Mihiel (Sept. 13). Battle of the Meuse-Argonne (Sept. 26-Nov. 11). Allies break Hindenburg Line (Oct. 5). Armistice signed (Nov. 11).

Zenger case. See Freedom of press.

The Flag at Half-Staff

The flag shall be flown at half-staff 30 days for the President of the U. S. or a former President; 10 days for the Vice President, the Chief Justice, a retired Chief Justice, or the Speaker of the House; until interment for an Associate Justice, a Cabinet member,

a former Vice President, a Senator, a Representative, a state or territorial governor. For other officials, the President or Congress shall rule. Jurisdiction on naval vessels, government buildings, etc., is left to the commanding officer.

Firsts in America

Occasionally other sources may differ with this list. Our selection is based on our editorial judgment.

Admiral in U. S. Navy: David Glasgow Farragut, 1866.

Air-mail route, first transcontinental: Between New York City and San Francisco, 1920.

Assembly, representative: House of Burgesses, founded in Virginia, 1619.

Bank established: Bank of North America, Philadelphia, 1781.

Birth in America of English parents: Virginia Dare, born Roanoke Island, N. C., 1587.

Botanic garden: Established by John Bartram in Philadelphia, 1728. (Oldest existing one was established in Cambridge, Mass., in 1807.)

Cartoon, colored: "The Yellow Kid," by Richard Outcault, in *New York World*, 1895.

College in America: Harvard, founded 1636.

College to confer degrees on women: Oberlin (Ohio) College, 1841.

College to establish coeducation: Oberlin (Ohio) College, 1833.

Electrocution of a criminal: William Kemmler in Auburn Prison, Auburn, N. Y., Aug. 6, 1890.

Five and Ten Cents Store: Founded by Frank Woolworth, Utica, N. Y., 1859. (moved to Lancaster, Pa., same year.)

Fraternity: Phi Beta Kappa; founded 1776, at College of William and Mary.

Law to be declared unconstitutional: U. S. Supreme Court: Judiciary Act of 1789. Case: Marbury vs. Madison, 1803.

Library, circulating: Philadelphia, 1731.

Newspaper published for a continuous period: *The Boston News-Letter*, 1704.

Newspaper, illustrated daily: *New York Daily Graphic*, 1873.

Newspaper published daily: *Pennsylvania Packet and General Advertiser*, Philadelphia, Sept., 1784.

Newsreel: Pathé Frères of Paris, in 1895. Circulated a weekly issue of their *Picture Journal*.

Oil well, commercial: Titusville, Pa., 1858.

Panel quiz show on radio: *Information Please*, May 17, 1938.

Postage stamps issued: 1847.

President pro tempore of the U. S. Senate: John Langdon, of New Hampshire, 1789.

and, transcontinental: Central Pacific Union Pacific railroads joined at Montory, Utah, May 10, 1869.
 s bank: The Provident Institute for ngs, Boston, 1816.
 e museum: Founded by Charleston C.) Library Society, 1773.
 aper: Home Insurance Co., Chicago, (10 floors, 2 added later).
 brought into America: At James-, Va., 1619, from a Dutch ship.
 y: Kappa Alpha Theta, at De Pauw iversity, 1870.
 o abolish capital punishment: Mich-1847.
 o enter Union after original 13: ont, 1791.
 heated building: Eastern Hotel, on, 1845.
 railroad (carried passengers and ht): Baltimore & Ohio, 1830.
 on record by union: Journeymen ers, New York, 1776.
 y: Opened in Boston, 1897.
 d" picture newspaper: *The Illus-d Daily News* (now *The Daily News*), York City, 1919.

Vaudeville theater: Gaiety Museum, Bos-ton, 1883.
 Woman cabinet member: Frances Perkins, Secretary of Labor, 1933.
 Woman candidate for President: Victoria Clafin Woodhull, nominated by National Woman's Suffrage Assn. on ticket of Na-tion Radical Reformers, 1872.
 Woman doctor of medicine: Elizabeth Blackwell; M.D. from Geneva Medical College of Western New York, 1849.
 Woman elected governor of a state: Mrs. Nellie Tayloe Ross, Wyoming, 1925.
 Woman elected to U. S. Senate: Mrs. Hattie Caraway, Arkansas; elected Nov. 1932.
 Woman graduate of law school: Mrs. Ada H. Kepley, Union College of Law, Chi-cago, 1870.
 Woman member of U. S. House of Repre-sentatives: Jeannette Rankin; elected Nov. 1916.
 Woman member of U. S. Senate: Mrs. Rebecca Latimer Felton of Georgia; ap-pointed Oct. 3, 1922.
 Woman suffrage granted: Wyoming Terri-tory, 1869.
 Written constitution: *Fundamental Orders of Connecticut*, 1639.

Societies and Foundations

Source: Questionnaires to Societies and Foundations.

AN BIBLE SOCIETY: Founded to translate, publish and encourage distribution of Holy Scriptures.
AN RED CROSS: Founded 1881. rams include services to armed forces veterans and their families, disaster , and other health, safety, and wel-activities.
SCOUTS OF AMERICA: Founded Purpose is to promote character de-ment, citizenship, training and cal fitness for boys.
FIRE GIRLS, INC.: Founded 1910, erpetuate spiritual ideals of the e and to stimulate and aid habits ng for health and character.
GIE CORPORATION OF NEW K: Founded 1911 by Andrew Car-to advance knowledge and under-iding in U. S. and certain British nonwealth areas. Grants awarded to ges and organizations engaged in re-h. Assets (1959): \$201,000,000 (cost).
GIE ENDOWMENT FOR INTER-ONAL PEACE: Founded 1910 by ew Carnegie. To work toward inter-nal peace. Assets (June 30, 1959): 04,695.
ONWEALTH FUND: Founded 1918 rs. Stephen V. Harkness. Purpose is qmote health through grants for al education, research, etc. Endow-(1960): \$77,000,000.

DUKE ENDOWMENT, THE: Founded 1924 by James B. Duke. Purpose is to assist North and South Carolina philanthropic institutions, including universities, hos-pitals, orphanages and the Methodist Church. Income (Dec. 31, 1959): \$155,-939,845.
ELKS, BENEVOLENT AND PROTECTIVE ORDER OF: Founded 1868 to practice charity, justice, brotherly love and fidel-ity. Charitable expenditures (1958): \$7,000,000 (by Lodges, 1880-1958, \$146,-361,070).
FIELD FOUNDATION, INC.: Founded 1940 by Marshall Field. Present purpose is to promote the welfare of children and im-prove intercultural and interracial rela-tions. Assets (1960): Over \$30,000,000.
FORD FOUNDATION: Founded 1936 by Henry and Edsel Ford to advance human welfare by identifying problems of na-tional importance and granting funds for efforts toward their solution, primarily through educational means. Assets (Sept. 30, 1959): \$1,859,201,577.
FREEMASONRY: Originated in England (1717); brought to America about 1733. It includes Symbolic Lodge (3 basic de-grees), Royal Arch, Council of Royal and Select Masters, Knights Templar, and Scottish Rite. It is universal in its philosophy, nonsectarian in membership.
GIRL SCOUTS OF THE U.S.A.: Founded 1912. Purpose is to help girls develop as

happy, resourceful individuals. Activities program emphasizes out-of-doors, creative arts, and community service.

GUGGENHEIM (JOHN SIMON) MEMORIAL FOUNDATION: Founded 1925. Purpose is to offer fellowships in all fields. Endowment (1960): \$45,000,000.

W. K. KELLOGG FOUNDATION: Founded 1930 by W. K. Kellogg. Operates by making grants supporting experimental programs in health, agricultural and educational fields. Assets (Aug. 31, 1959): \$73,921,908, book value; \$215,184,419, market value.

KIWANIS INTERNATIONAL: Founded 1915 to render service to youth, community and nation.

KNIGHTS OF COLUMBUS: Founded 1882. Purpose is to render pecuniary aid to its sick, disabled and needy members; promotes social and intellectual intercourse among its members and conducts educational, charitable, social, relief and religious work.

KNIGHTS OF PYTHIAS: Founded 1864. Purpose is to promote social and fraternal well-being of its members. Auxiliary bodies: Dramatic Order of Knights Khorassan, Junior Order of Princes of Syracuse, Order of Pythian Sisters.

LEAGUE OF WOMEN VOTERS OF THE UNITED STATES: Founded in 1920 upon ratification of 19th Amendment to inform the electorate and increase citizen participation in government. Annual expenditure: about \$1,600,000.

LIONS CLUBS, INTERNATIONAL ASSOCIATION OF: Founded 1917. Purpose is to recognize community needs and develop means of meeting them. World's largest service club organization.

NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE: Organized 1909. It seeks equal citizenship rights for Negroes through legal action, legislation and education.

NATIONAL FOUNDATION (formerly National Foundation for Infantile Paralysis, Inc.): Founded 1938 by F. D. Roosevelt. Funds are raised by the "New March of Dimes" in January. Financed research resulting in development of Salk vaccine. Program includes medical research,

patient care, and education of the professions in birth defects and arthritis as well as polio.

NATIONAL GEOGRAPHIC SOCIETY: Founded 1888. Purpose is to increase, diffuse geographic knowledge. Publishes monthly *National Geographic Magazine*, weekly *Geographic School Bulletin*, maps, books, and *National Geographic News Bulletins*.

ODD FELLOWS, INDEPENDENT ORDER OF: Introduced into U. S. in 1819. Purpose is to promote social relations and provide benefits for members.

ROCKEFELLER FOUNDATION: Founded 1913 to promote well-being of mankind throughout world; makes grants to agencies in fields of medical and natural sciences, agricultural sciences, social sciences and humanities. Principal F (Dec. 31, 1959): \$518,219,214.

ROTARY INTERNATIONAL: Founded 1905. Purpose is to foster the ideal of service in business and community life and promote international understanding.

RUSSELL SAGE FOUNDATION: Founded 1907 by Mrs. Russell Sage to improve social and living conditions in U. S. Program emphasizes utilization of social sciences in professional practice. Assets (Sept. 1959): \$28,500,000.

SLOAN FOUNDATION, ALFRED P.: Founded 1934 by Alfred P. Sloan, Jr. Purpose is to increase and spread economic knowledge and promote basic research in science and other subjects. Assets (Dec. 1959): \$216,200,000.

TWENTIETH CENTURY FUND: Founded 1919 by Edward A. Filene to promote research and public education on economic and social problems. Assets (Dec. 1959): \$19,100,000.

YOUNG MEN'S CHRISTIAN ASSOCIATION: Founded 1844. Purpose is to improve spiritual, social, recreational and physical lives of young people. Endowment (1959): \$77,299,100.

YOUNG WOMEN'S CHRISTIAN ASSOCIATION OF THE U.S.A.: Founded 1851 to advance physical, social, intellectual and spiritual interests of young women; to build fellowship of women devoted to pursuit of Christian ideals.

Longest Broadway Runs

As of Oct. 12, 1960. Source: *Variety*.

1. Life with Father	3,224
2. Tobacco Road	3,182
3. Abie's Irish Rose	2,327
4. Oklahomal	2,248
5. South Pacific	1,925
6. My Fair Lady	1,904
7. Harvey	1,775
8. Born Yesterday	1,642
9. The Voice of the Turtle	1,557
10. Arsenic and Old Lace	1,444
11. Helzapoppin	1,404

* Figures are rentals collected by film distributors from exhibitors in U. S. and Canada.

Top Grossing Films*

As of Jan. 6, 1960. Source: *Variety*.

1. Gone With the Wind	\$33,500
2. The Ten Commandments	32,000
3. Around World in 80 Days	22,000
4. The Robe	17,500
5. Bridge on the River Kwai	15,000
6. Greatest Show on Earth	12,800
7. From Here to Eternity	12,500
8. This Is Cinerama	12,500
9. White Christmas	12,000
10. Giant	12,000
11. Samson and Delilah	11,500

★ CELEBRATED PERSONS ★

For birth information on Governors, Senators, and Supreme Court Justices, see Index.

Locations and dates are those of birth. A name in parentheses is the original name or form of the name of the individual.

The listings in this section have been gathered from various sources, including the subjects thereof, but the *Information Please Almanac* cannot guarantee the accuracy of each individual item. We have learned to accept the date and place of birth that any lady or gentleman claims for herself or himself and not argue about it. Where we have not been able to learn the date and place of birth, we have not attempted to invent the items.

- Hank (Henry) (baseball player); Birmingham, Ala., Feb. 5, 1934.
- Bud (William) (actor); Asbury Park, N. J., Oct. 2, 1898.
- George (director & dramatist); Fort Lee, N. Y., June 25, 1889.
- Walter (actor); St. Paul, Minn., June 3, 1891.
- Dean (U. S. statesman); Middlebury, Conn., Apr. 11, 1893.
- Sherman (former Asst. to Pres.); East Dover, Vt., Jan. 8, 1899.
- Joe (baseball player); Coughatta, N. Y., Oct. 30, 1927.
- Charles (cartoonist); Westfield, Mass., Jan. 7, 1912.
- Konrad (Chancellor, Ger. Fed.); Cologne, Ger., Jan. 5, 1876.
- Larry (harmonica player); Baltimore, Md., Feb. 10, 1914.
- Brian (actor); King's Norton, Worcestershire, England, May 2, 1902.
- Conrad (poet); Savannah, Ga., Aug. 5, 1896.
- Licia (soprano); Bari, It., July 22, 1891.
- Eddie (Edward Albert Heimberger); Rock Island, Ill., Apr. 22, 1908.
- Robert (actor); New York City, Feb. 14, 1901.
- Mohammed (Pakistani statesman & poet); Barisal, E. Bengal, Oct. 19, 1899.
- Gracie (comedienne); San Francisco, Cal., July 26, 1906.
- Mel (Melvin Allen Israel) (sports writer); Birmingham, Ala., Feb. 14, 1901.
- Steve (comedian); New York City, N. Y., June 6, 1921.
- June (Jan Allyson) (actress); New York City, Oct. 7, 1923.
- Joseph W., Jr. (journalist); Avon, Mass., Oct. 11, 1910.
- Stewart (journalist); New York City, N. Y., July 7, 1914.
- Walter (baseball manager); Butler, Pa., Dec. 1, 1911.
- Don (actor); Kenosha, Wis., May 8, 1898.
- Cleveland (author); Nahant, Mass., N. H., 1917.
- AMOS (Freeman F. Gosden) (actor); Richmond, Va., May 5, 1899.
- ANDERSON, Eddie. See Rochester.
- ANDERSON, Judith (actress); Adelaide, Austr., Feb. 10, 1898.
- ANDERSON, Marian (contralto); Philadelphia, Pa., Feb. 17, 1902.
- ANDERSON, Robert Woodruff (playwright); New York City, Apr. 28, 1917.
- ANDREWS, Dana (actor); Collins, Miss., Jan. 1, 1912.
- ANDREWS, Julie (Julia Wells) (actress); Walton-on-Thames, Eng., Oct. 1, 1935.
- ANDY (Charles J. Correll) (actor); Peoria, Ill., Feb. 2, 1890.
- ANGELES, Victoria de los (Victoria Gamez Cima) (soprano); Barcelona, Sp., Nov. 1, 1923.
- ANGELI, Pier (Anna Maria Pierangeli) (actress); Cagliari, It., June 19, 1932.
- ANTONELLI, Johnny (baseball player); Rochester, N. Y., Apr. 12, 1930.
- ARCARO, Eddie (jockey); Cincinnati, Ohio, Feb. 19, 1916.
- ARCHIPENKO, Alexander (sculptor); Kiev, Rus., May 30, 1887.
- ARDEN, Elizabeth (cosmetician); Ontario, Can., 1891.
- ARDEN, Eve (Eunice Quedens) (actress); Mill Valley, Calif.
- ARLEN, Harold (Hyman Arluck) (composer); Buffalo, N. Y., Feb. 15, 1905.
- ARMOUR, Thomas Dickson (Tommy) (golfer); Edinburgh, Scotland, Sept. 24, 1895.
- ARMSTRONG, Henry (boxer); St. Louis, Mo., Dec. 12, 1912.
- ARMSTRONG, Louis (trumpeter); New Orleans, La., July 4, 1900.
- ARNAZ, Desi (Desiderio) (actor & band leader); Santiago, Cuba, Mar. 2, 1917.
- ARNES, James (actor); Minneapolis, Minn., May 26, 1923.
- ARNO, Peter (cartoonist); New York City, Jan. 8, 1904.
- ARRAU, Claudio (pianist); Chillán, Chile, Feb. 6, 1904.
- ASHBURN, Richie (baseball player); Tilden, Neb., Mar. 19, 1927.
- ASTAIRE, Fred (Frederick Austerlitz) (dancer & actor); Omaha, Neb., May 10, 1899.
- ATKINSON, Brooks (drama critic); Melrose, Mass., Nov. 28, 1894.

- ATKINSON, Ted (jockey); Toronto, Ont., Can., June 17, 1916.
- ATTLEE, Clement R. (British statesman); London, Eng., Jan. 3, 1883.
- AUDEN, W. H. (Wystan Hugh Auden) (poet); York, Eng., Feb. 21, 1907.
- AUTRY, Gene (actor); Tlaga, Tex., Sept. 29, 1907.
- BACALL, Lauren (actress); New York City, Sept. 16, 1924.
- BACCALONI, Salvatore (basso); Rome, It., Apr. 14, 1900.
- BACKHAUS, Wilhelm (pianist); Leipzig, Ger., Mar. 26, 1884.
- BAILEY, Pearl (singer); Newport News, Va., Mar. 29, 1918.
- BAINTER, Fay (actress); Los Angeles, Calif., 1893.
- BAKER, Josephine (singer); St. Louis, Mo., 1907.
- BALANCHINE, George (ballet director); St. Petersburg, Rus., Jan. 9, 1904.
- BALDWIN, Faith (novelist); New Rochelle, N. Y., Oct. 1, 1893.
- BALL, Lucille (actress); Jamestown, N. Y., Aug. 6, 1911.
- BANCROFT, Anne (Annemarie Italiano) (actress); New York City, Sept. 17, 1931.
- BANKHEAD, Tallulah (actress); Huntville, Ala., Jan. 31, 1903.
- BANKS, Ernie (baseball player); Dallas, Tex., Jan. 31, 1931.
- BANNISTER, Roger (mile runner); Harrow, Eng., Mar. 24, 1929.
- BARBER, Red (Walter L.) (sports announcer); Columbus, Miss., Feb. 17, 1908.
- BARBER, Samuel (composer); West Chester, Pa., Mar. 9, 1910.
- BARBIROLI, Sir John (orchestra conductor); London, Eng., Dec. 2, 1899.
- BARDOT, Brigitte (actress); Paris, Fr., 1935.
- BARTHELMLESS, Richard (actor); New York City, May 9, 1897.
- BARTHOLOMEW, Freddie (actor); London, Eng., Mar. 28, 1924.
- BARTON, James (actor); Gloucester, N. J., Nov. 1, 1890.
- BARUCH, Bernard (financier); Camden, S. C., Aug. 19, 1870.
- BASIE, Count (William) (band leader); Red Bank, N. J., Aug. 21, 1906.
- BATCHELOR, Clarence Daniel (cartoonist); Osage City, Kans.
- BATISTA y ZALDIVAR, Fulgencio (former President, Cuba); Banes, Cuba, Jan. 16, 1901.
- BAUDOUIN (King, Belgium); Palace of Laeken, Belg., Sept. 7, 1930.
- BAUER, Hank (Henry) (baseball player); E. St. Louis, Ill., July 31, 1922.
- BAXTER, Anne (actress); Michigan City, Ind., May 7, 1923.
- BEEBE, William (zoologist); Brooklyn, N. Y., July 29, 1877.
- BEECHAM, Sir Thomas (orchestra conductor); St. Helens, Eng., Apr. 29, 1879.
- BEGLEY, Ed (Edward) (actor); Hartford, Conn., Mar. 25, 1901.
- BEHAN, Brendan (playwright-author); Dublin, Ireland, Feb. 9, 1923.
- BEHRMAN, S. N. (Samuel N.) (dramatist); Worcester, Mass., June 9, 1893.
- BELAFONTE, Harry (singer); New York, Mar. 1, 1927.
- BELLAMY, Ralph (actor); Chicago, Ill., 17, 1905.
- BEMELMANS, Ludwig (essayist); M. Tirol, Apr. 27, 1898.
- BENDIX, William (actor); New York, Jan. 14, 1906.
- BEN-GURION, David (David Green) (Prime Minister, Israel); Plónsk, Pol., Oct. 16, 1886.
- BENNETT, Joan (actress); Palisades, N. Y., Feb. 27, 1910.
- BENNETT, Robert Russell (composer); New York City, Mo., June 15, 1894.
- BENNY, Jack (Benjamin Kubelsky) (composer); Waukegan, Ill., Feb. 14, 1894.
- BENTON, Thomas Hart (painter); New York, Mo., Apr. 15, 1889.
- BERG, Patty (Patricia Jane) (golfer); Minneapolis, Minn., Feb. 13, 1918.
- BERGEN, Edgar (ventriloquist); Chicago, Ill., Feb. 16, 1903.
- BERGMAN, Ingmar (film producer-director); Uppsala, Sweden, July 14, 1918.
- BERGMAN, Ingrid (actress); Stockholm, Swed., 1917.
- BERLE, Milton (Milton Berlinger) (comedian); New York City, July 12, 1908.
- BERLIN, Irving (Isidore Baline) (writer); Temum, Russia, May 11, 1888.
- BERLIN, Richard E. (publisher); Omaha, Nebr., Jan. 18, 1894.
- BERMAN, Shelley (Sheldon) (comedian); Chicago, Ill., Feb. 3, 1926.
- BERNSTEIN, Leonard (composer & conductor); Lawrence, Mass., Aug. 25, 1918.
- BERRA, Yogi (Lawrence) (baseball player); St. Louis, Mo., May 12, 1925.
- BERRYMAN, James T. (cartoonist); Washington, D. C., June 8, 1902.
- BIKEL, Theodore (actor-singer); Vienna, Austria, May 2, 1924.
- BING, Rudolf (opera executive); Vienna, Austria, Jan. 9, 1902.
- BLACKMER, Sidney (actor); Salisbury, W. Va., July 13, 1898.
- BLAIK, Earl H. (football coach); Detroit, Mich., Feb. 15, 1897.
- BLAINE, Vivian (Vivian Stapleton) (actress); Newark, N. J., Nov. 21, 1921.
- BLITZSTEIN, Marc (composer); Philadelphia, Pa., Mar. 2, 1905.
- BLOOM, Claire (actress); London, Eng., 15, 1931.
- BLOOMGARDEN, Kermit (theatrical producer); Brooklyn, N. Y., Dec. 15, 1900.
- BOGARDE, Dirk (actor); Hampstead, London, Eng., Mar. 28, 1921.
- BOHLEN, Charles E. (author and diplomat); Clayton, N. Y., Aug. 30, 1904.
- BOHR, Niels (physicist); Copenhagen, Denmark, Oct. 7, 1885.
- BOLGER, Ray (actor); Dorchester, Mass., 10, 1906.
- BOLT, Tommy (golfer); Haworth, England, March 31, 1919.
- BOND, Ward (actor); Denver, Colo., 1905.

- Pat (Charles) (singer); Jacksonville, June 1, 1934.
- Richard (actor); Los Angeles, Calif.
- Shirley (Thelma Booth Ford) actress; New York City, Aug. 30, 1907.
- Victor (pianist & comedian); Copenhagen, Jan. 3, 1909.
- NE, Ernest (actor); Hamden, Conn., 4, 1917.
- E, Frank (movie director); Salt Lake Utah, Apr. 23, 1893.
- L, Connie (singer); New Orleans, La.,
- Catherine Drinker (biographer); Ford, Pa., Jan. 1, 1897.
- Chester (author and former diplomat); Springfield, Mass., Apr. 5, 1901.
- William (actor); Cambridge, Ohio, 5, 1898.
- Charles (actor); Figeac, Fr., Aug. 28,
- Ken (baseball player); Liberty, Mo., 0, 1931.
- Kay (novelist & poet); St. Paul, Feb. 19, 1903.
- N, Eddie (actor); Astoria, N. Y., 1920.
- Y, Omar N. (U. S. general); Clark, Feb. 12, 1893.
- VSky, Alexander (pianist); Kiev, Feb. 16, 1896.
- Marlon (actor); Omaha, Nebr., 1924.
- Willy (Herbert Frahm) (Mayor, Berlin); Lübeck, Ger., Dec. 18, 1913.
- Georges (painter); Argenteuil, Fr., 3, 1882.
- Rossano (actor); Bologna, It., Sept. 6,
- N, Walter (actor); Lynn, Mass., July 4,
- Teresa (singer); Toledo, Ohio, 1931.
- EY, David (news commentator); Wilton, N. C., July 10, 1920.
- Robert (Irish statesman); Dublin, Sept. 25, 1894.
- Benjamin (composer); Lowestoft, Nov. 22, 1913.
- Van Wyck (literary critic); Plainfield, N. J., Feb. 16, 1886.
- Cecil (radio commentator); New York, Pa., Sept. 14, 1907.
- Joe E. (actor); Holgate, Ohio, July 2,
- John Mason (drama critic); Louisville, Ky., July 3, 1900.
- Pamela (actress); London, Eng., 1918.
- Vanessa (Smylla Brind) (actress); New York, N. Y., Mar. 24, 1928.
- LL, Herbert, Jr. (U. S. statesman); New York, N. Y., Feb. 20, 1904.
- K, Dave (jazz pianist); Concord, N. H., Dec. 6, 1920.
- GE, Avery (sports executive); Detroit, Mich., Sept. 28, 1887.
- R, Yul (actor); Sakhalin (an island in the Pacific), July 11, 1917.
- LD, Art (Arthur) (columnist); New York, N. Y., Oct. 20, 1925.
- BUCK, Pearl S. (novelist); Hillsboro, W. Va., June 26, 1892.
- BUHL, Bob (baseball player); Saginaw, Mich., Aug. 12, 1928.
- BULGANIN, Nikolai A. (Soviet statesman); Nizhni-Novgorod, Rus., June 11, 1895.
- BUNCHE, Ralph J. (U. N. official); Detroit, Mich., Aug. 7, 1904.
- BURDETTE, Lou (baseball player); Nitro, W. Va., Nov. 22, 1926.
- BURKE, Adm. Arleigh A. (U. S. naval officer); Boulder, Colo., Oct. 19, 1901.
- BURKE, Billie (actress); Washington, D. C., Aug. 7, 1886.
- BURNS, George (Nathan Birnbaum) (comedian); New York City, Jan. 20, 1896.
- BURROWS, Abe (playwright & producer); New York City, Dec. 18, 1910.
- BURTON, Richard (Richard Jenkins) (actor); Pontrhydyfen, Wales, Nov. 10, 1925.
- BUSH, Vannevar (engineer); Everett, Mass., Mar. 11, 1890.
- BUTLER, Richard Austen (British statesman); Attock Serai, India, Dec. 9, 1902.
- BUTTONS, Red (Aaron Chwatt) (comedian); New York City, Feb. 5, 1919.
- BYINGTON, Spring (actress); Colorado Springs, Colo., Oct. 17, 1898.
- CADMUS, Paul (painter & etcher); New York City, Dec. 17, 1904.
- CAESAR, Sid (comedian); Yonkers, N. Y., Sept. 8, 1922.
- CAGNEY, James (actor); New York City, July 17, 1904.
- CAIN, James M. (novelist); Annapolis, Md., July 1, 1892.
- CALDER, Alexander ("mobile" sculptor); Lawnton, Pa., July 22, 1898.
- CALDWELL, Erskine (novelist); White Oak, Ga., Dec. 17, 1903.
- CALDWELL, Taylor (novelist); Preswich, Eng., Sept. 7, 1900.
- CALHOUN, Rory (Francis Durgin) (actor); Los Angeles, Calif., Aug. 8, 1923.
- CALLAS, Maria (soprano); New York City, Dec. 4, 1923.
- CALLOWAY, Cab (band leader); Rochester, N. Y., Dec. 25, 1907.
- CAMPANELLA, Roy (baseball player); Homestead, Pa., Nov. 19, 1921.
- CANBY, Henry Seidel (literary critic); Wilmington, Del., Sept. 6, 1878.
- CANHAM, Edwin D. (editor); Auburn, Maine, Feb. 13, 1904.
- CANIFF, Milton (cartoonist); Hillsboro, Ohio, Feb. 28, 1907.
- CANTOR, Eddie (Edward Iskovitz) (comedian); New York City, Jan. 31, 1892.
- CAPOTE, Truman (novelist); New Orleans, La., Sept. 30, 1924.
- CAPP, Al (cartoonist); New Haven, Conn., Sept. 28, 1909.
- CAPRA, Frank (movie director); Palermo, Sicily, May 18, 1897.
- CAREY, MacDonald (actor); Sioux City, Iowa, Mar. 15, 1913.
- CARLE, Frankie (pianist); Providence, R. I., Mar. 15, 1903.
- CARLSON, Richard (actor); Albert Lea, Minn., Apr. 29, 1912.

- CARMICHAEL, Hoagy (song writer); Bloomington, Ind., Nov. 22, 1899.
- CARNEY, Art (actor); Mt. Vernon, N. Y., Nov. 4, 1918.
- CARNOVSKY, Morris (actor); St. Louis, Mo., 1898.
- CARON, Leslie (actress); Paris, Fr., July 1, 1931.
- CARRADINE, John (actor); New York City, Feb. 5, 1906.
- CARROLL, Leo G. (actor); Weedon, Eng.
- CARROLL, Paul Vincent (dramatist); Dundalk, Ire., July 10, 1900.
- CARSON, Jack (actor); Carman, Can., Oct. 27, 1910.
- CARSON, Rachel (science writer); Springdale, Pa., May 27, 1907.
- CASADESUS, Robert (pianist); Paris, Fr., Apr. 7, 1899.
- CASALS, Pablo (cellist); Vendrell, Sp., Dec. 29, 1876.
- CASTRO RUZ, Fidel (Premier, Cuba); Mayarí, Oriente, Cuba, Aug. 13, 1927.
- CAVALLARO, Carmen (pianist); New York City, May 6, 1913.
- CHAGALL, Marc (painter); Vitebsk, Rus., July 7, 1887.
- CHAMPION, Gower (dancer & actor); Geneva, Ill., June 22, 1921.
- CHAMPION, Marge (dancer & actress); Los Angeles, Calif., Sept. 2, 1923.
- CHANDLER, Jeff (Ira Grossel) (actor); Brooklyn, N. Y., Dec. 15, 1918.
- CHANNING, Carol (comedienne); Seattle, Wash., Jan. 31, 1921.
- CHAPLIN, Charles (comedian); London, Eng., Apr. 16, 1889.
- CHARISSE, Cyd (Tula Finklea) (actress, dancer); Amarillo, Tex., Mar. 8, 1923.
- CHASE, Ilka (actress); New York City, Apr. 8, 1905.
- CHASE, Stuart (writer); Somersworth, N. H., Mar. 8, 1888.
- CHÁVEZ, Carlos (composer); near Mexico City, Mex., June 13, 1899.
- CHAYESKY, Paddy (Sidney) (dramatist); New York City, Jan. 29, 1923.
- CHEVALIER, Maurice (actor); Paris, Fr., Sept. 12, 1888.
- CHIANG Kai-shek (President, Nat. China); Feng-hwa, China, Oct. 31, 1887.
- CHIRICO, Giorgio de (painter); Volos, Gr., July 10, 1888.
- CHOU En-lai (Premier, Comm. China); Huaiyin, China, 1898.
- CHRISTIE, Agatha (novelist); Torquay, Eng., 1897.
- CHURCHILL, Sarah (actress); London, Eng., Oct. 7, 1914.
- CHURCHILL, Sir Winston S. (British statesman); Oxfordshire, Eng., Nov. 30, 1874.
- CLAIR, René (René Chomette) (movie director); Paris, Fr., Nov. 11, 1898.
- CLAIRE, Ina (Ina Fagan) (actress); Washington, D. C., Oct. 15, 1892.
- CLARK, Dane (actor); New York City, Feb. 18, 1915.
- CLARK, Dick (Richard) (TV personality); Mt. Vernon, N. Y., Nov. 30, 1929.
- CLIBURN, Van (Harvey Lavan Cliburn, Jr.) (pianist); Shreveport, La., July 12, 1934.
- CLIFT, Montgomery (actor); Omaha, N. D., Oct. 17, 1920.
- CLOETE, Stuart (novelist); Paris, Fr., 23, 1897.
- CLOONEY, Rosemary (singer); Maysville, Ky., May 23, 1928.
- CLURMAN, Harold (stage director); New York City, Sept. 18, 1901.
- COBB, Lee J. (actor); New York City, 9, 1911.
- COBB, Ty (Tyrus E.) (baseball player); Banks Co., Ga., Dec. 17, 1886.
- COBURN, Charles (actor); Savannah, Ga., June 19, 1877.
- COCA, Imogene (comedienne); Philadelphia, Pa.
- COCTEAU, Jean (poet & dramatist); Paris, Fr., July 5, 1891.
- COLAVITO, Rocky (baseball player); New York City, Aug. 10, 1933.
- COLBERT, Claudette (Lily Chauchoin) (actress); Paris, Fr., Sept. 13, 1905.
- COLE, Nat King (Nathaniel Adams Collier) (singer); Montgomery, Ala., Mar. 17, 1917.
- COLLINGE, Patricia (actress); Dublin, Ireland, Sept. 20, 1894.
- COLLINS, Dorothy (Marjorie Chaney) (singer); Windsor, Ont., Canada, Nov. 1926.
- COMMAGER, Henry S. (historian); New York City, Pa., Oct. 25, 1902.
- COMO, Perry (Pierino) (singer); Carleburg, Pa., May 18, 1913.
- COMPTON, Arthur H. (physicist); Wooster, Ohio, Sept. 10, 1892.
- CONANT, James B. (scientist & educator); Dorchester, Mass., Mar. 26, 1893.
- CONDON, Eddie (musician); Goodland, Kan., Nov. 16, 1905.
- CONLEY, Donald (baseball player); Muskogee, Okla., Nov. 10, 1930.
- CONNELLY, Marc (dramatist); McKeesport, Pa., Dec. 13, 1890.
- CONROY, Frank (actor); Derby, Eng., 14, 1890.
- CONTE, Richard (actor); New York City, Mar. 24, 1914.
- COOGAN, Jackie (actor); Los Angeles, Cal., Oct. 26, 1914.
- COOPER, Gary (Frank) (actor); Helena, Mont., May 7, 1901.
- COOPER, Jackie (actor); Los Angeles, Cal., Sept. 15, 1922.
- COPLAND, Aaron (composer); Brooklyn, N. Y., Nov. 14, 1900.
- COREY, Wendell (actor); Dracut, Mass., 20, 1914.
- CORNELL, Katharine (actress); Berlin, N. Y., Feb. 16, 1898.
- CORRELL, Charles J. See Andy
- COSTAIN, Thomas Bertram (novelist); Bedford, Ont., Can., May 8, 1885.
- COTTEN, Joseph (actor); Petersburg, Va., 1905.
- COTTON, Thomas Henry (golfer); New York City, Eng., Jan. 26, 1907.
- COWARD, Noel (dramatist & actor); Teddington, Eng., Dec. 16, 1899.
- COWLES, Gardner (publisher); Algonquin, Ill., Jan. 31, 1903.
- COX, Wally (Wallace Maynard Cox) (comedian); Detroit, Mich., Dec. 6, 1924.

- S, James Gould (novelist); Chicago, Aug. 19, 1903.
- Jeanne (actress); Barstow, Calif., 25, 1925.
- ORD, Broderick (actor); Philadelphia, Dec. 9, 1911.
- ORD, Cheryl (theatrical producer); Ohio, Sept. 24, 1902.
- ORD, Joan (Lucille LeSueur) (actress); San Antonio, Tex., Mar. 23, 1908.
- A. J. (Archibald J. Cronin) (novelist); Cardross, Scot., July 19, 1896.
- Joe (baseball executive); San Francisco, Calif., Oct. 12, 1906.
- TE, Walter (news commentator); St. Louis, Mo., Nov. 4, 1916.
- Hume (actor); London, Ont., Can., 18, 1911.
- Bing (Harry) (actor & singer); Taft, Wash., May 2, 1904.
- Bob (band leader & actor); Spokane, Wash., Aug. 23, 1913.
- John (TV critic); Milwaukee, Wis., 8, 1912.
- Milton (radio announcer); New York City, Apr. 16, 1897.
- Russel (dramatist); Findlay, Ohio, 10, 1893.
- Xavier (orchestra leader); Barcelona, Sp., Jan. 1, 1900.
- George (movie director); New York City, July 7, 1899.
- William Lawrence (Bill) (radio-TV announcer); Pittsburgh, Pa., Feb. 18, 1920.
- Robert (actor); Berkeley, Calif., Aug. 1, 1911.
- GS, E. E. (Edward Estlin Cummings) (poet); Cambridge, Mass., Oct. 14, 1894.
- GS, Robert (actor); Joplin, Mo., 9, 1910.
- Harlow H. (industrialist); Eaton, Mich., Aug. 15, 1893.
- Tony (Bernard Schwartz) (actor); New York City, June 3, 1925.
- Michael (movie director); Budapest, Dec. 24, 1883.
- Clifford (pianist); London, Eng., 3, 1907.
- Lilly (hat designer); Beigles, Fr.
- Marlene (actress); Minneapolis, Minn., 1.
- Salvador (painter); Figueras, Sp., May 4.
- John (news commentator); Johannesburg, S. Afr., Feb. 20, 1914.
- Vic (Vito Farinola) (singer); New York, N. Y., June 12, 1928.
- GE, Dorothy (actress); Cleveland, 1.
- A, Alexandra (dancer); Peterhof, Russia.
- Denise (Denise Billecard) (actress); Paris, Fr., Sept. 8, 1925.
- Bobby (Walden Robert Cassotto) (actor); New York City, May 14, 1937.
- Linda (actress); Dallas, Tex.
- James (James Ercolani) (actor); Philadelphia, Pa., June 8, 1936.
- IX, Danielle (actress); Bordeaux, France, May 1, 1917.
- DAVIES, Marlon (Marlon Douras) (actress); New York City, Jan. 1, 1900.
- DAVIS, Bette (actress); Lowell, Mass., Apr. 5, 1908.
- DAVIS, Joan (actress); St. Paul, Minn., June 29, 1912.
- DAVIS, Miles (musician); Alton, Ill., May 25, 1926.
- DAVIS, Sammy, Jr. (singer); New York City, Jan. 1926.
- DAVIS, Stuart (painter); Philadelphia, Pa., Dec. 7, 1894.
- DAY, Doris (Doris von Kappelhoff) (singer); Cincinnati, Ohio, Apr. 3, 1924.
- DAY, Laraine (Loraine Johnson) (actress); Roosevelt, Utah, Oct. 13, 1920.
- DEAN, Dizzy (Jay Hanna Dean) (baseball player and announcer); Lucas, Ark., Jan. 16, 1911.
- DEAN, Jimmy (singer); Plainview, Tex., Aug. 10, 1928.
- DE GAULLE, Charles (President, France); Lille, Fr., Nov. 22, 1890.
- DE HAVILLAND, Olivia (actress); Tokyo, Jap., July 1, 1916.
- DEMARET, Jim (golfer); Houston, Tex., May 10, 1910.
- DE MILLE, Agnes (choreographer); New York City.
- DEMPSEY, Jack (William H.) (boxer); Manassa, Colo., June 24, 1894.
- DERAIN, André (painter); Chatou, Fr., June 10, 1880.
- DE ROCHEMONT, Louis (movie producer); Chelsea, Mass., Jan. 13, 1899.
- DE SICA, Vittorio (actor & movie director); Sora, It., July 7, 1901.
- DE VALERA, Eamon (President, Ireland); New York City, Oct. 14, 1882.
- DEVINE, Andy (actor); Flagstaff, Ariz., Oct. 7, 1905.
- DEWEY, Thomas E. (U. S. statesman); Owosso, Mich., Mar. 24, 1902.
- DE WILDE, Brandon (actor); New York City, Apr. 9, 1942.
- DICKSON, Murry (baseball player); Tracy, Mo., Aug. 21, 1916.
- DIEFENBAKER, John G. (Fr. Min., Canada); Grey County, Ont., Can., Sept. 18, 1895.
- DIETRICH, Marlene (Maria Magdalena von Losch) (actress); Berlin, Dec. 27, 1904.
- DILLMAN, Bradford (actor); San Francisco, Calif., Apr. 14, 1930.
- DILLON, C. Douglas (Under Secy. of State, U. S.); Geneva, Switz., Aug. 21, 1909.
- DIMAGGIO, Joe (baseball player); Martinez, Calif., Nov. 25, 1914.
- DISNEY, Walt (animated cartoonist); Chicago, Ill., Dec. 5, 1901.
- DOLIN, Anton (dancer & choreographer); Slinfold, Sussex, Eng., July 27, 1904.
- DONLEVY, Brian (actor); Portadown, Ire., Feb. 9, 1903.
- DONOVAN, Richard (baseball player); Quincy, Mass., Dec. 7, 1927.
- DOOLEY, Thomas (physician-author); St. Louis, Mo., Jan. 17, 1927.
- DOOLITTLE, James H. (aviator); Alameda, Calif., Dec. 14, 1896.
- DORATI, Antal (orchestra conductor); Budapest, Hung., Apr. 9, 1906.

- DOS PASSOS, John** (novelist); Chicago, Ill., Jan. 14, 1896.
- DOUGLAS, Kirk** (Issur Danielovitch) (actor); Amsterdam, N. Y., Dec. 9, 1916.
- DOUGLAS, Melvyn** (Melvyn Hesselberg) (actor); Macon, Ga., Apr. 5, 1901.
- DOWLING, Eddie** (Edward Goucher) (actor & director); Woonsocket, R. I., Dec. 9, 1894.
- DRAKE, Alfred** (singer & actor); New York City, Oct. 7, 1914.
- DRAPER, Paul** (dancer); Florence, It., Oct. 25, 1911.
- DRUMMOND, Roscoe** (journalist); Theresa, N. Y.
- DRYSDALE, Don** (baseball player); Van Nuys, Calif., July 23, 1936.
- DUBINSKY, David** (David Dobniewski) (labor leader); Brest-Litovsk, Poland, Feb. 22, 1892.
- DUGLOS, Jacques** (French Communist leader); Louey, Fr., Oct. 2, 1896.
- DUKE, Patty** (Anna Marie Duke) (actress); New York City, Dec. 14, 1946.
- DULLES, Allen W.** (CIA Director, U. S.); Watertown, N. Y., Apr. 7, 1893.
- DU MAURIER, Daphne** (novelist); London, Eng., May 13, 1907.
- DUNNE, Irene** (actress); Louisville, Ky., Dec. 20, 1904.
- DUNNOCK, Mildred** (actress); Baltimore, Md., Jan. 25.
- DURANTE, Jimmy** (comedian); New York City, Feb. 10, 1893.
- DUROCHER, Leo** (former baseball manager); West Springfield, Mass., July 27, 1906.
- DYKES, Jimmie** (baseball coach); Philadelphia, Pa., Nov. 10, 1896.
- ECKSTINE, Billy** (singer); Pittsburgh, Pa., July 8, 1914.
- EDDY, Nelson** (baritone); Providence, R. I., June 29, 1901.
- EDEN, Sir Anthony** (British statesman); England, June 12, 1897.
- EGLEVSKY, André** (dancer); Moscow, Rus., Dec. 21, 1917.
- EISENHOWER, Dwight D.** (President, U. S.); Denison, Tex., Oct. 14, 1890.
- EISENHOWER, Milton S.** (educator); Abilene, Kans., Sept. 15, 1899.
- EKBERG, Anita** (actress); Malmö, Swed.
- ELDRIDGE, Florence** (Florence McKechnie) (actress); Brooklyn, N. Y., Sept. 5, 1901.
- ELIOT, T. S.** (Thomas Stearns Eliot) (poet); St. Louis, Mo., Sept. 26, 1888.
- ELIZABETH II** (Queen, Gr. Brit., etc.); London, Eng., Apr. 21, 1926.
- ELLINGTON, Duke** (Edward) (band leader); Washington, D. C., Apr. 29, 1899.
- ELLIOTT, Herb** (mile runner); Perth, Australia, Feb. 25, 1938.
- ELMAN, Mischa** (violinist); Stalnoye, Rus., Jan. 20, 1891.
- EMERSON, Faye** (actress); Elizabeth, La., July 8, 1917.
- EVANS, Dame Edith** (actress); London, Eng., Feb. 8, 1888.
- EVANS, Maurice** (actor); Dorchester, Eng., June 3, 1901.
- EWELL, Tom** (Yewell Tompkins) (actor); Owensboro, Ky., Apr. 29, 1909.
- FABIAN** (Fabian Anthony Forte) (singer); Philadelphia, Pa., Feb. 6, 1943.
- FABRAY, Nanette** (Nanette Fabarés) (tress); San Diego, Calif., Oct. 27, 1922.
- FADIMAN, Clifton** (literary critic); Brooklyn, N. Y., May 15, 1904.
- FAIRBANKS, Douglas, Jr.** (actor); New York City, Dec. 9, 1909.
- FAIRLESS, Benjamin F.** (industrialist); Pigeon Run, Ohio, May 3, 1890.
- FALKENBURG, Jinx** (Eugenia) (actress); Barcelona, Sp., Jan. 21, 1919.
- FARRELL, James T.** (novelist); Chicago, Ill., Feb. 27, 1904.
- FAULKNER, William** (novelist); New Albany, Miss., Sept. 25, 1897.
- FERBER, Edna** (novelist); Kalamazoo, Mich., Aug. 15, 1887.
- FERNANDEL** (Fernand Contandin) (actor); Marseille, France, May 8, 1903.
- FERRER, Jose** (actor); Santurce, P. R., Aug. 8, 1912.
- FERRER, Mel** (actor); Elberon, N. J., Aug. 25, 1917.
- FIELD, Betty** (actress); Boston, Mass., Aug. 8, 1918.
- FIELD, Marshall, Jr.** (newspaperman); New York City, June 15, 1916.
- FIELDS, Gracie** (actress); Rochdale, Eng., Jan. 9, 1898.
- FISHER, Eddie** (singer); Philadelphia, Pa., Aug. 10, 1928.
- FITZGERALD, Barry** (William J. Shields) (actor); Dublin, Ire., Mar. 1888.
- FITZGERALD, Ella** (singer); Newport News, Va., Apr. 25, 1918.
- FITZSIMMONS, Sunny Jim** (horse trainer); Sheephead Bay, N. Y., July 23, 1874.
- FLAGSTAD, Kirsten** (soprano); Hamar, Norway, July 12, 1895.
- FLEMING, Rhonda** (Marilyn Louis) (actress); Los Angeles, Calif., Aug. 10, 1923.
- FOCH, Nina** (actress); Leyden, Neth., Aug. 20, 1924.
- FONDA, Henry** (actor); Grand Island, N. Y., May 16, 1905.
- FONTAINE, Joan** (actress); Tokyo, Japan, Aug. 22, 1917.
- FONTANNE, Lynn** (actress); London, England, Aug. 1887.
- Fonteyn, Dame Margot** (Margaret Fonteyn) (ballerina); Reigate, Eng., May 1919.
- FORD, Glenn** (Gwyllyn Ford) (actor); Victoria, Can., May 1, 1916.
- FORD, Henry, II** (industrialist); Detroit, Mich., Sept. 4, 1917.
- FORD, John** (movie director); Cape Elizabeth, Maine, Feb. 1, 1895.
- FORD, Tennessee Ernie** (entertainer); Fayetteville, Tenn., Feb. 13, 1919.
- FORD, Whitey** (Edward) (baseball player); New York City, Oct. 21, 1928.
- FORESTER, O. S.** (Cecil Scott Forester) (novelist); Cairo, Egypt, Aug. 27, 1899.
- FOX, Nellie** (Jacob Nelson Fox) (baseball player); St. Thomas, Pa., Dec. 25, 1922.
- FRANCESCATTI, Zino** (violinist); Marsa, Fr., Aug. 9, 1905.
- FRANCIOSA, Anthony** (Anthony Francis) (actor); New York City, Oct. 25, 1928.

- S, Arlene (Arlene Francis Kazanjian) (actress); Boston, Mass., 1908.
- S, Francisco (Chief of State, Spain); Madrid, Sp., Dec. 4, 1892.
- Y, William (actor); Burlington, Vt., Feb. 26, 1893.
- ICK IX (King, Denmark); nr. Copenhagen, Den., Mar. 11, 1899.
- ord C. (baseball executive); Wawaka, Ind., Dec. 19, 1894.
- Robert (baseball player); Lafayette, La., Mar. 24, 1930.
- Rudolf (composer); Prague, Czech., 1884.
- Frank F. (baseball player and manager); New York City, Sept. 9, 1898.
- Robert (poet); San Francisco, Calif., 1875.
- Christopher (dramatist); Bristol, Eng., 1897.
- N, George Keith (financial executive); Waterloo, Iowa, Oct. 12, 1910.
- , Carl (baseball player); Stony Mills, Pa., Mar. 8, 1922.
- Jean (actor); Paris, Fr., May 17, 1910.
- Clark (actor); Cadiz, Ohio, Feb. 1, 1910.
- Eva (actress); Budapest, Hung.
- Zsa Zsa (Sari) (actress); Budapest, Hungary, Feb. 6, 1923.
- ELL, Hugh (British statesman); London, Eng., Apr. 9, 1906.
- TH, John (economist); Iona Station, Canada, Oct. 15, 1908.
- Paul (author); New York City, 1897.
- George H. (public-opinion statistician); Jefferson, Iowa, Nov. 18, 1901.
- Greta (Greta Gustafsson) (actress); Stockholm, Swed., Sept. 18, 1905.
- Mary (soprano); Aberdeen, Scot., 1877.
- R, Ava (actress); Smithfield, N. C., 1922.
- R, Erle Stanley (novelist); Malden, Mass., July 17, 1889.
- D, Judy (Frances Gumm) (actress); Minneapolis, Minn., June 10, 1922.
- James (actor); Norman, Okla., Apr. 1910.
- AY, Dave (comedian); Schenectady, N. Y., July 13, 1913.
- Greer (actress); County Down, Ireland, 1890.
- William (Arturo Caxiola) (actor); San Francisco, Calif., Dec. 2, 1893.
- Mitzi (actress); Chicago, Ill., Sept. 1910.
- Barbara Bel (actress); New York City, Oct. 31, 1922.
- VE (Ginette Marguerite Auger) (actress); Paris, Apr. 17, 1930.
- Grace (actress); New York City, 1880.
- N, Ira (lyricist); New York City, 1896.
- Althea (tennis player); Silver, S. C., 1927.
- Sir John (actor); London, Eng., 1904.
- GILELS, Emil (pianist); Odessa, Ukr., 1916.
- GILES, Warren (baseball executive); Tiskilwa, Ill., May 28, 1896.
- GILLESPIE, Dizzy (John Birks Gillespie) (musician); Cheraw, S. C., Oct. 21, 1917.
- GIMBEL, Bernard F. (merchant); Vincennes, Ind., Apr. 10, 1885.
- GISH, Dorothy (actress); Massillon, Ohio, Mar. 11, 1898.
- GISH, Lillian (actress); Springfield, Ohio, Oct. 14, 1896.
- GLEASON, Jackie (actor); Brooklyn, N. Y., Feb. 26, 1916.
- GOBEL, George (comedian); Chicago, Ill., May 20, 1920.
- GODDARD, Paulette (actress); Great Neck, N. Y., June 3, 1911.
- GODFREY, Arthur (entertainer); New York City, Aug. 31, 1903.
- GOLDBERG, Rube (Reuben) (cartoonist); San Francisco, Calif., July 4, 1883.
- GOLDWYN, Samuel (Samuel Goldfish) (movie producer); Warsaw, Pol., 1882.
- GONZALEZ, Pancho (tennis player); Los Angeles, Calif., May 9, 1928.
- GOODMAN, Benny (clarinetist); Chicago, Ill., May 30, 1909.
- GORDON, Max (play producer); New York City, 1892.
- GORDON, Ruth (actress); Wollaston, Mass., Oct. 30, 1896.
- GOREN, Charles H. (bridge expert); Philadelphia, Pa., Mar. 4, 1901.
- GORME, Eydie (singer); New York City, Aug. 16, 1931.
- GOSDEN, Freeman F. See Amos.
- GOULD, Chester (cartoonist); Pawnee, Okla., 1900.
- GOULD, Glenn (musician); Toronto, Canada, Sept. 25, 1932.
- GOULD, Morton (composer); Richmond Hill, N. Y., Dec. 10, 1913.
- GRABLE, Betty (actress); St. Louis, Mo., Dec. 18, 1916.
- GRAHAM, Billy (William F.) (evangelist); Charlotte, N. C., Nov. 7, 1918.
- GRAHAM, Martha (choreographer); Pittsburgh, Pa.
- GRAHAME, Gloria (Gloria Grahame Hallward) (actress); Los Angeles, Calif., Nov. 28, 1924.
- GRANGE, Red (Harold) (football player and announcer); Forksville, Pa., June 13, 1904.
- GRANGER, Stewart (James Stewart) (actor); London, Eng., May 6, 1913.
- GRANT, Cary (Archibald A. Leach) (actor); Bristol, Eng., Jan. 18, 1904.
- GRAVES, Robert (poet & novelist); London, Eng., July 26, 1895.
- GRAY, Harold (cartoonist); Kankakee, Ill., Jan. 20, 1894.
- GRECO, José (dancer); Montorio nel Fren-tani, It., Dec. 23, 1918.
- GREEN, Paul (dramatist); Lillington, N. C., Mar. 17, 1894.
- GREENE, Graham (novelist); Berkhamstead, Eng., Oct. 2, 1904.
- GRIFFITH, Andy (Andrew Samuel) (actor); Mount Airy, N. C., June 1, 1928.
- GRIMM, Charley (baseball executive); St. Louis, Mo., Aug. 28, 1898.

- GRISWOLD, A. Whitney (educator); Morristown, N. J., Oct. 27, 1906.
- GROFÉ, Ferde (composer); New York City, Mar. 27, 1892.
- GROMYKO, Andrei A. (Soviet statesman); Starye Gromyki, Rus., July 5, 1909.
- GRONCHI, Giovanni (President, Italy); Pontedera, It., Sept. 10, 1887.
- GROPIUS, Walter (architect); Berlin, Ger., May 18, 1883.
- GROVE, Lefty (Robert M.) (baseball player); Lonaconing, Md., Mar. 6, 1900.
- GRUENTHER, Gen. Alfred M. (Pres., Red Cross); Platte Center, Nebr., Mar. 3, 1899.
- GUINNESS, Sir Alec (actor); Marylebone, London, Eng., Apr. 2, 1914.
- GULDAHL, Ralph (golfer); Dallas, Tex., Nov. 22, 1912.
- GUNTHER, John (journalist & author); Chicago, Ill., Aug. 30, 1901.
- GUSTAVUS VI (King, Sweden); Stockholm, Swed., Nov. 11, 1882.
- HACKETT, Francis (critic & novelist); Kilkeny, Ire., Jan. 21, 1883.
- HAGEN, Walter (golfer); Rochester, N. Y., Dec. 21, 1892.
- HAGERTY, James C. (Pres. Press Secy., U. S.); Plattsburgh, N. Y., May 9, 1909.
- HAILE SELASSIE I (Emperor, Ethiopia); Ethiopia, July 17, 1891.
- HALAS, George (football coach); Chicago, Ill., Feb. 2, 1895.
- HAMMARSKJÖLD, Dag (Sec. Gen., U. N.); Jönköping, Swed., July 29, 1905.
- HAMMETT, Dashiell (novelist); St. Marys Co., Md., May 27, 1894.
- HAND, Learned (U. S. jurist); Albany, N. Y., Jan. 27, 1872.
- HANEY, Fred (baseball manager); Albuquerque, N. Mex., Apr. 25, 1898.
- HANSON, Howard (composer); Wahoo, Nebr., Oct. 28, 1896.
- HARDWICKE, Sir Cedric (actor); Lye, Eng., Feb. 19, 1893.
- HARRIDGE, Will (baseball executive); Chicago, Ill., Oct. 16, 1886.
- HARRIS, Bucky (Stanley R.) (baseball manager); Port Jervis, N. Y., Nov. 8, 1896.
- HARRIS, Jed (stage producer); Vienna, Aus., Feb. 25, 1900.
- HARRIS, Julie (actress); Grosse Pointe Park, Mich., Dec. 2, 1925.
- HARRIS, Phil (band leader); Linton, Ind., June 24, 1906.
- HARRIS, Roy (composer); Lincoln Co., Okla., Feb. 12, 1898.
- HARRISON, Rex (actor); Huyton, Eng., Mar. 5, 1908.
- HARRISON, Wallace K. (architect); Worcester, Mass., Sept. 28, 1895.
- HART, Moss (dramatist); New York City, Oct. 24, 1904.
- HARVEY, Laurence (Larushka Skikne) (actor); Joniskis, Lithuania, Jan. 10, 1928.
- HATLO, Jimmy (cartoonist); Providence, R. I., Sept. 1, 1898.
- HAVOC, June (June Hovick) (actress); Seattle, Wash.
- HAWKINS, Jack (actor); London, Eng., Sept. 14.
- HAYES, Helen (Helen Hayes Brown) (actress); Washington, D. C., Oct. 10, 1900.
- HAYWARD, Leland (theatrical producer); Nebraska City, Nebr., Sept. 13, 1902.
- HAYWARD, Susan (Edythe Marrener) (actress); Brooklyn, N. Y., June 30, 1918.
- HAYWORTH, Rita (Margarita Cansino) (actress); New York City, Oct. 17, 1918.
- HEALD, Henry T. (educator); Lincoln, N. H., Nov. 8, 1904.
- HEARST, David W. (publisher); New York City, Dec. 2, 1915.
- HEARST, Randolph A. (publisher); New York City, Dec. 2, 1915.
- HEARST, William Randolph, Jr. (publisher); New York City, Jan. 27, 1908.
- HECHT, Ben (novelist & dramatist); New York City, Feb. 28, 1894.
- HEFLIN, Van (actor); Walters, Okla., 13, 1910.
- HEIFETZ, Jascha (violinist); Vilna, 13, Feb. 2, 1901.
- HEISS, Carol (Elizabeth) (skater); New York City, Jan. 30, 1940.
- HELLMAN, Lillian (dramatist); New Orleans, La., June 20, 1905.
- HEMINGWAY, Ernest (novelist); Oak Park, Ill., July 21, 1898.
- HENDERSON, Skitch (pianist); Birmingham, Eng., Jan. 27, 1918.
- HENIE, Sonja (skater); Oslo, Nor., Apr. 1913.
- HENREID, Paul (actor); Trieste, Jan. 10, 1913.
- HEPBURN, Audrey (actress); Brussels, Belgium, May 4, 1929.
- HEPBURN, Katharine (actress); Hartford, Conn., Nov. 8, 1909.
- HERBLOCK (Herbert L. Block) (cartoonist); Chicago, Ill., Oct. 13, 1909.
- HERMAN, Woody (band leader); Milwaukee, Wis., May 16, 1913.
- HERSEY, John R. (novelist); Tlentsin, China, June 17, 1914.
- HERTER, Christian A. (U. S. Secy. of State); Paris, Fr., Mar. 28, 1895.
- HESS, Dame Myra (pianist); London, England, Feb. 25, 1890.
- HESTON, Charlton (actor); Evanston, Ill., Oct. 4, 1924.
- HEYERDAHL, Thor (author & explorer); Larvik, Nor., Oct. 6, 1914.
- HILDEGARDE (Hildegard Loretta Sell) (actress); Adell, Wis., Feb. 1, 1906.
- HILLARY, Sir Edmund (explorer); New Zealand, July 20, 1919.
- HILLIARD, Harriet. See Nelson, Harriet.
- HINDEMITH, Paul (composer); Hanau, Germany, Nov. 16, 1895.
- HIROHITO (Emperor, Japan); Japan, 29, 1901.
- HIRSCH, Max (horse trainer); Fredericksburg, Tex., July 12, 1880.
- HITCHCOCK, Alfred J. (movie director); London, Aug. 13, 1899.
- HO Chi-minh (President, Dem. Rep. of Vietnam); Annam, Indo-China, c. 1891.
- HOAD, Lew (Lewis) (tennis player); Geelong, NSW, Australia, Nov. 23, 1934.
- HOBBSON, Laura Z. (Laura K. Zamet) (novelist); New York City.

- Gil (Gilbert) (baseball player);
 ton, Ind., Apr. 4, 1924.
- Ben (golfer); Dublin, Tex., Aug. 13,
- , William (William Franklin Beedle,
 actor); O'Fallon, Ill., Apr. 17, 1918.
- AY, Judy (Judith Tuvim) (actress);
 York City, June 21, 1923.
- Celeste (actress & singer); New York
 Apr. 29, 1919.
- , Herbert C. (U. S. statesman); West
 h, Iowa, Aug. 10, 1874.
- , J. Edgar (FBI Director, U. S.);
 ngton, D. C., Jan. 1, 1895.
- Bob (Leslie Townes Hope) (come-
 London, Eng., May 29, 1903.
- , Hedda (Elda Furry) (columnist);
 aysburg, Pa., June 2, 1890.
- Lena (singer) Brooklyn, New York,
- Y, Rogers (baseball player and
 Winters, Tex., Apr. 27, 1896.
- IZ, Vladimir (pianist); Kiev, Rus.,
 1904.
- , Edward Everett (actor); Brooklyn,
 Mar. 18, 1886.
- , Robert (actor); Los Angeles, Calif.,
- AN, John (John Haussmann) (stage
 ie director); Bucharest, Rum., Sept.
- 2.
- , Roy W. (publisher); Gano, Ohio,
 1883.
- Quincy (historian-commentator; Bos-
 lass., Aug. 17, 1900.
- , Jim Lee (football coach); Lonoke,
 Sept. 27, 1914.
- L, Carl (baseball executive); Car-
 Mo., June 22, 1903.
- , Rock (Roy Fitzgerald) (actor);
 tka, Ill., Nov. 17, 1925.
- , Langston (poet); Joplin, Mo., Feb.
- enry (actor); Louisville, Ky., Oct. 3,
- Kim (Janet Cole) (actress); De-
 Mich., Nov. 12, 1922.
- Tab (actor); New York City, July
- 1.
- W, Chet (commentator); Cardwell,
 Dec. 10, 1911.
- Sol (impresario); Pogar, Rus., Apr.
- I (King, Jordan); Jordan, May 2,
- John (movie director); Nevada, Mo.,
 1906.
- S, Robert M. (educator); Brooklyn,
 Jan. 17, 1899.
- Barbara (heiress); New York City,
 1912.
- Betty (Betty Thornberg) (singer);
 Creek, Mich., Feb. 26, 1921.
- Aldous (novelist); Godalming,
 July 26, 1894.
- Julian S. (biologist); England,
 2, 1887.
- acques (composer); Paris, Fr., Aug.
- O.
- William (dramatist); Independence,
 May 3, 1913.
- IONESCO, Eugene (playwright); Slatina,
 Rumania, Nov. 26, 1912.
- IRELAND, John (actor); Vancouver, B. C.,
 Can., Jan. 30, 1915.
- ISHERWOOD, Christopher (novelist); Disley,
 Cheshire, Eng., Aug. 26, 1904.
- ITURBI, José (pianist); Valencia, Sp., Nov.
 28, 1895.
- IVES, Burl (folksinger & actor); Hunt, Ill.,
 June 14, 1909.
- JACOBS, Hirsch (horse trainer); New York
 City, Apr. 8, 1904.
- JACKSON, Mahalia (singer); New Orleans,
 La., Oct. 26, 1912.
- JAFFE, Sam (actor); New York City, Mar. 8,
 1898.
- JAMES, Harry (trumpeter); Albany, Ga.,
 Mar. 15, 1916.
- JAMESON, Margaret Storm (novelist);
 Whitby, Eng., 1897.
- JEANMAIRE, Renée (dancer & actress); Paris,
 Fr., Apr. 29, 1924.
- JEBB, Sir Gladwyn (British statesman);
 England, Apr. 25, 1900.
- JEFFERS, Robinson (poet); Pittsburgh, Pa.,
 Jan. 10, 1887.
- JESSEL, George (comedian); New York City,
 Apr. 3, 1898.
- JESSUP, Philip O. (U. S. statesman); New
 York City, Jan. 5, 1897.
- JOHANSSON, Ingemar (boxer); Göteborg,
 Swed., Sept. 22, 1932.
- JOHN XXIII (Angelo Giuseppe Roncalli)
 (Pope); Sotto il Monte, It., Nov. 25, 1881.
- JOHN, Augustus (painter); Tenby, Wales,
 Jan. 4, 1879.
- JOHNS, Glynis (actress); Durban, So. Af.,
 Oct. 5, 1923.
- JOHNSON, Van (actor); Newport, R. I., Aug.
 20, 1916.
- JOHNSTON, Eric A. (movie executive); Wash-
 ington, D. C., Dec. 21, 1896.
- JONES, Bobby (golfer); Atlanta, Ga., Mar.
 17, 1902.
- JONES, James (novelist); Robinson, Ill., Nov.
 6, 1921.
- JONES, Jennifer (Phyllis Isley) (actress);
 Tulsa, Okla., Mar. 2, 1919.
- JONES, Sam (baseball player); Stewartville,
 Ohio, Dec. 14, 1925.
- JORDAN, James. See McGee.
- JORDAN, Marian. See McGee.
- JOURDAN, Louis (actor); Marseilles, Fr., June
 18, 1921.
- JULIANA (Queen, Netherlands); The Hague,
 Neth., Apr. 30, 1909.
- JUNG, Carl G. (psychoanalyst); Basel, Switz.,
 July 26, 1875.
- KADAR, János (Hungarian statesman); Hun-
 gary, 1912.
- KAISER, Henry J. (industrialist); Sprout
 Brook, N. Y., May 9, 1882.
- KALINE, Al (Albert) (baseball player); Balti-
 more, Md., Dec. 19, 1934.
- KALTENBORN, Hans V. (radio commentator);
 Milwaukee, Wis., July 9, 1878.
- KANIN, Garson (dramatist & director);
 Rochester, N. Y., Nov. 24, 1912.
- KANTOR, MacKinlay (novelist); Webster City,
 Iowa, Feb. 4, 1904.

- KARLOFF, Boris (William Henry Pratt) (actor); Dulwich, Eng., Nov. 23, 1887.
- KAUFMAN, George S. (dramatist); Pittsburgh, Pa., Nov. 16, 1889.
- KAYE, Danny (David Daniel Kominski) (comedian); Brooklyn, New York, Jan. 18, 1913.
- KAYE, Nora (Nora Koreff) (ballerina); New York City, 1920.
- KAYE, Sammy (band leader); Cleveland, Ohio, Mar. 13, 1910.
- KAZAN, Elia (movie & stage director); Constantinople, Turk., Sept. 7, 1909.
- KEATON, Buster (comedian); Piqua, Kans., Oct. 4, 1896.
- KEEL, Howard (singer & actor); Gillespie, Ill., Apr. 13.
- KELLAND, Clarence Budington (novelist); Portland, Mich., July 11, 1881.
- KELLER, Helen (author & social worker); Tusculumbia, Ala., June 27, 1880.
- KELLY, Emmett (circus clown); Sedan, Kans., 1898.
- KELLY, Gene (actor); Pittsburgh, Pa., Aug. 23, 1912.
- KELLY, Grace (actress & Princess of Monaco); Philadelphia, Pa., Nov. 12, 1929.
- KELLY, Jack (actor); Astoria, N. Y., Sept. 16, 1927.
- KELLY, Walt (cartoonist); Philadelphia, Pa., Aug. 25, 1913.
- KENNAN, George F. (author and former diplomat); Milwaukee, Wis., Feb. 16, 1904.
- KENNEDY, Arthur (actor); Worcester, Mass., Feb. 17, 1914.
- KENNEDY, Robert F. (U. S. govt. official); Brookline, Mass., Nov. 20, 1925.
- KENT, Rockwell (painter); Tarrytown Heights, N. Y., June 21, 1882.
- KERENSKY, Alexander (former Russian Premier); Simbirsk, Rus., 1881.
- KEROUAC, Jack (novelist); Lowell, Mass., Mar. 12, 1922.
- KERR, Deborah (actress); Helensburgh, Scot., Sept. 30, 1921.
- KEYES, Frances Parkinson (novelist); Univ. of Va., July 21, 1885.
- KHACHATURIAN, Aram (composer); Tiflis, Rus., June 6, 1903.
- KHRUSHCHEV, Nikita S. (Premier, U.S.S.R.); Kalinovka, Rus., Apr. 17, 1894.
- KIDD, Michael (choreographer); Brooklyn, N. Y., 1917.
- KIEPURA, Jan (tenor); Sosnowiec, Pol., May 16, 1902.
- KIERAN, John (author); New York City, Aug. 2, 1892.
- KILGALLAN, Dorothy (columnist); Chicago, Ill., July 3, 1913.
- KILLEBREW, Harmon (baseball player); Payette, Idaho, June 29, 1936.
- KING, Alexander (writer-commentator-artist); Vienna, Austria, Nov. 13, 1900.
- KING, Dennis (actor); Coventry, Eng., Nov. 2, 1897.
- KING, Henry (movie director); Christianburg, Va., Jan. 24, 1896.
- KINGSLEY, Sidney (Sidney Kirschner) (dramatist); New York City, Oct. 18, 1906.
- KINTNER, Earl W. (FTC chairman); Corydon, Ind., Nov. 6, 1912.
- KIPNIS, Alexander (basso); Ukraine, Feb. 1896.
- KIRK, Grayson (educator); Jefferson, Ohio, Oct. 12, 1903.
- KIRK, Lisa (singer); Charleroi, Pa.
- KIRKPATRICK, Ralph (harpsichordist); Leominster, Mass., June 10, 1911.
- KIRSTEN, Dorothy (soprano); Montclair, N. J., July 6, 1919.
- KITT, Eartha (singer & actress); North, S. C., Jan. 26, 1928.
- KLUSZEWSKI, Ted (Theodore) (baseball player); Argo, Ill., Sept. 10, 1924.
- KNIGHT, John S. (publisher); Blue Springs, W. Va., Oct. 26, 1894.
- KNOPF, Alfred A. (publisher); New York City, Sept. 12, 1892.
- KODÁLY, Zoltán (composer); Kecskemet, Hung., Dec. 16, 1882.
- KOESTLER, Arthur (novelist); Budapest, Hung., Sept. 5, 1905.
- KOKOSCHKA, Oskar (painter); Pöchlarn, Aus., Mar. 1, 1886.
- KOSTELANETZ, Andre (orchestra conductor); Petrograd, Rus., Dec. 22, 1901.
- KOVACS, Ernie (comedian); Trenton, N. J., Jan. 23, 1919.
- KRAMER, John A. (tennis player); Las Vegas, Nev., Aug. 1, 1921.
- KRAMER, Stanley E. (movie producer); New York City, Sept. 29, 1913.
- KREISLER, Fritz (violinist); Vienna, Austria, Feb. 2, 1875.
- KROCK, Arthur (journalist); November 1886.
- KRUPA, Gene (drummer & band leader); Chicago, Ill., Jan. 15, 1909.
- KUBELIK, Rafael (orchestra conductor); Bychory, Bohemia, June 29, 1914.
- KUENEN, Harvey (baseball player); Milwaukee, Wis., Dec. 4, 1930.
- KULLMAN, Charles (tenor); New Haven, Conn., Jan. 13, 1903.
- KURTZ, Efrem (orchestra conductor); Petersburg, Rus., Nov. 7, 1900.
- LABINE, Clem (Clement) (baseball player); Lincoln, R. I., Aug. 6, 1926.
- LADD, Alan (actor); Hot Springs, Ark., Jan. 3, 1913.
- LA FARGE, Oliver (author & anthropologist); New York City, Dec. 19, 1901.
- LAHR, Bert (Irving Lahrhelm) (comedian); New York City, Aug. 13, 1895.
- LAINE, Frankie (Frank Paul LoVecchio) (singer); Chicago, Ill., Mar. 30, 1913.
- LAMARR, Hedy (actress); Vienna, Austria, 1901.
- LAMAS, Fernando (actor); Buenos Aires, Argentina, Jan. 9.
- LALOUR, Dorothy (actress); New Orleans, La., Dec. 10, 1914.
- LANCASTER, Burt (actor); New York City, Nov. 2, 1913.
- LANCHESTER, Elsa (Elsa Sullivan) (actress); London, Eng., Oct. 28, 1902.
- LANDERS, Ann (Mrs. Jules Lederer) (columnist); Sioux City, Iowa, July 14, 1913.
- LANDY, John (mile runner); Australia, 1930.
- LANG, Fritz (movie director); Vienna, Austria, Dec. 5, 1890.

- SA, Julius (singer); Brooklyn, N. Y., 2, 1930.
- SA, Don (baseball player); Michigan Ind., Aug. 7, 1929.
- TON, Charles (actor); Scarborough, July 1, 1899.
- RD, Peter (actor); London, Eng., 7, 1923.
- NCE, David (journalist); Philadelphia, Dec. 25, 1888.
- NCE, Marjorie (soprano); Deans A., Austr., Feb. 17, 1909.
- NCE, Steve (Sidney Leibowitz) (er); New York City, July 8, 1935.
- Frank (football coach); O'Neill, Aug. 21, 1908.
- David (movie director); Croydon, Mar. 25, 1908.
- BUSIER (Charles-Édouard Jeanneret) (itect); La Chaux De Fonds, Switz., 8, 1887.
- ypsy Rose (Rose Hovik) (entertainer); e, Wash., Feb. 9, 1914.
- Peggy (Norma Egstrom) (singer); stown, N. Dak., May 26, 1920.
- LIENNE, Eva (actress & director); on, Eng., Jan. 11, 1899.
- N, Herbert H. (former U. S. Senator); York City, Mar. 28, 1878.
- NN, Lotte (soprano); Perleberg, Ger., 2, 1885.
- Janet (Jeanette Morrison) (actress); d, Calif., July 6, 1927.
- Vivien (Vivien Mary Hartley) (ac- Darjeeling, India, Nov. 5, 1913.
- ON, Margaret (actress); Birmingham, Feb. 26, 1922.
- ORF, Erich (orchestra conductor); a, Aus., Feb. 4, 1912.
- ON, Jack (actor); Boston, Mass., Feb. 5, 1902.
- R, Alan Jay (librettist); New York Aug. 31, 1918.
- R, Max (social writer); Minsk, Rus., 20, 1902.
- R, Mervyn (movie producer & director); Francisco, Calif., Oct. 15, 1900.
- R, Oscar (pianist); Pittsburgh, Pa., 27, 1906.
- R, Sam (actor); New York City, 1907.
- Carlo (novelist); Turin, It., Nov. 29, 1907.
- Herman (theatrical producer); Phila- la, Pa., Mar. 1, 1908.
- Fulton, Jr. (columnist); Washington, Apr. 30, 1903.
- Jerry (comedian); Newark, N. J., 16, 1926.
- Joe E. (comedian); New York City.
- John L. (labor leader); Lucas, Iowa, 2, 1880.
- Ted (band leader); Circleville, Ohio.
- illy (science writer); Berlin, Ger., 2, 1906.
- GE (Wladziu Liberace) (pianist); Allis, Wis., May 16, 1919.
- Beatrice (actress); Toronto, Can., 9, 1898.
- utang (philosopher); Changchow, Oct. 10, 1895.
- LINDBERGH, Anne Morrow (writer); Engle- wood, N. J., 1907.
- LINDBERGH, Charles A. (aviator); Detroit, Mich., Feb. 4, 1902.
- LINDSAY, Howard (dramatist); Waterford, N. Y., Mar. 29, 1889.
- LINKLETTER, Art (actor); Moose Jaw, Sask., Can., July 17, 1912.
- LIPCHITZ, Jacques (sculptor); Druskieniki, Lith., Aug. 22, 1891.
- LIPPMANN, Walter (author & journalist); New York City, Sept. 23, 1889.
- LITTLE, Lou (football coach); Leominster, Mass., Dec. 6, 1893.
- LITTLE, W. Lawson, Jr. (golfer); Newport, R. I., Jan. 23, 1910.
- LIVESY, Roger (actor); Barry, Wales, June 25, 1906.
- LLEWELLYN, Richard (novelist); St. David's, Wales.
- LLOYD, Harold (comedian); Burchard, Nebr., Apr. 20, 1894.
- LLOYD, Selwyn (British diplomat); West Kirby, Eng., July 28, 1904.
- LOCKE, Bobby (Arthur D'Arcy) (golfer); Transvaal, So. Africa, Nov. 20, 1917.
- LOCKWOOD, Margaret (actress); Karachi, India, Sept. 15, 1916.
- LODGE, Henry Cabot, Jr. (U. N. Delegate, U. S.); Nahant, Mass., July 5, 1902.
- LOESSER, Frank (song writer); New York City, June 29, 1910.
- LOEWE, Frederick (song writer); Vienna, Aus., June 10, 1904.
- LOGAN, Joshua (director & dramatist); Tex- arkana, Tex., Oct. 5, 1908.
- LOLLOBRIGIDA, Gina (actress); Subiaco, It., 1928.
- LOMBARDO, Guy (band leader); London, Can., June 19, 1902.
- LONDON, Julie (Julie Peck) (singer); Santa Rosa, Calif., Sept. 26, 1926.
- LOOS, Anita (novelist); Sisson, Calif., Apr. 26, 1893.
- LOPEZ, Al (baseball manager); Tampa, Fla., Aug. 20, 1908.
- LOPEZ, Vincent (band leader); Brooklyn, N. Y., Dec. 10, 1898.
- LOREN, Sophia (Sofia Scicolone) (actress); Rome, It., Sept. 20, 1934.
- LORRE, Peter (actor); Rosenberg, Hung., June 26, 1904.
- LOUIS, Joe (Joe Louis Barrow) (boxer); Lex- ington, Ala., May 13, 1914.
- LOVEJOY, Frank (actor); New York City, Mar. 28.
- LOW, David (cartoonist); Dunedin, N. Z., Apr. 7, 1891.
- LOWELL, Robert (poet); Boston, Mass., Mar. 1, 1917.
- LOY, Myrna (Myrna Williams) (actress); near Helena, Mont., Aug. 2, 1905.
- LUCE, Clare Boothe (playwright and former diplomat); New York City, Apr. 10, 1903.
- LUCE, Henry R. (publisher); Shantung, China, Apr. 3, 1898.
- LUKAS, Paul (actor); Budapest, Hung., May 26, 1895.
- LUNT, Alfred (actor); Milwaukee, Wis., Aug. 19, 1893.
- LUPINO, Ida (actress); London, Eng., Feb. 4, 1918.

- MacARTHUR, Douglas (U. S. general); Little Rock Barracks, Ark., Jan. 26, 1880.
- MacDONALD, Jeanette (soprano); Philadelphia, Pa., June 18, 1907.
- MacKENZIE, Gisele (Marie Marguerite Louise Gisele LaFleche) (singer); Winnipeg, Canada, Jan. 10, 1927.
- MacLEISH, Archibald (poet); Glencoe, Ill., May 7, 1892.
- MACMILLAN, Harold (British Prime Minister); London, Eng., Feb. 10, 1894.
- MacMURRAY, Fred (actor); Kankakee, Ill., Aug. 30, 1908.
- MacRAE, Gordon (singer); East Orange, N. J., Mar. 12, 1921.
- MADISON, Guy (Robert Moseley) (actor); Bakersfield, Calif., Jan. 19, 1922.
- MAGNANI, Anna (actress); Rome, It., Mar. 7, 1908.
- MAILER, Norman (novelist); Long Branch, N. J., Jan. 31, 1923.
- MAIN, Marjorie (Mary Tomlinson Krebs) (actress); Acton, Ind., Feb. 24, 1890.
- MAKARIOS III, Archbishop (Michael Christodoulos Mouskos) (Greek Orthodox prelate); Ano Panayia, Paphos, Cyprus, Aug. 13, 1913.
- MALDEN, Karl (actor); Chicago, Ill., Mar. 22, 1913.
- MALENKOV, Georgi M. (Soviet statesman); Orenburg, Rus., Jan. 8, 1902.
- MALONE, Dorothy (actress) Chicago, Ill., Jan. 30, 1925.
- MALRAUX, André (novelist); Paris, Fr., Nov. 3, 1901.
- MANGANO, Silvana (actress); Rome, It.
- MANGRUM, Lloyd (golfer); Dallas, Tex., Aug. 1, 1914.
- MANKIEWICZ, Joseph L. (movie director); Wilkes-Barre, Pa., Feb. 11, 1909.
- MANSFIELD, Jayne (Jane Palmer) (actress); Bryn Mawr, Pa., Apr. 19, 1933.
- MANTLE, Mickey (baseball player); Spavina, Okla., Oct. 20, 1931.
- MANTOVANI, Annunzio (orchestra conductor); Venice, 1905.
- MAO Tse-tung (Chmn. of People's Council, Comm. China); Shao Shan, China, 1893.
- MARCEAU, Marcel (mime); Strasbourg, Fr., Mar. 22, 1923.
- MARCH, Fredric (Frederick Bickel) (actor); Racine, Wis., Aug. 31, 1897.
- MARCH, Hal (Harold Mendelson) (actor); San Francisco, Calif., Apr. 22, 1920.
- MARCIANO, Rocky (Rocco Marchegiano) (boxer); Brockton, Massachusetts, September 1, 1924.
- MARIS, Roger (baseball player); Hibbing, Minn., Sept. 10, 1934.
- MARITAIN, Jacques (philosopher); Paris, Fr., Nov. 18, 1882.
- MARKOVA, Alicia (ballerina); London, Eng., Dec. 1, 1910.
- MARSHALL, Herbert (actor); London, Eng., May 23, 1890.
- MARSHALL, Thurgood (lawyer); Baltimore, Md., July 2, 1908.
- MARTIN, Dean (comedian & singer); Steubenville, Ohio, June 7, 1917.
- MARTIN, Joseph W., Jr. (U. S. Representative, Mass.); No. Attleboro, Mass., Nov. 3, 1884.
- MARTIN, Mary (actress); Weatherford, Tex., Dec. 1, 1914.
- MARTIN, Tony (actor & singer); San Francisco, Calif., Dec. 25, 1914.
- MARTIN, William McChesney, Jr. (finance executive); St. Louis, Mo., Dec. 17, 1904.
- MARTINELLI, Giovanni (tenor); Montebelluna, It., Oct. 22, 1885.
- MARX, Chico (Leonard) (comedian); New York City, Mar. 22, 1891.
- MARX, Groucho (Julius) (comedian); New York City, Oct. 2, 1895.
- MARX, Harpo (Arthur) (comedian); New York City, Nov. 23, 1893.
- MASEFIELD, John (poet); Ledbury, Eng., June 1, 1878.
- MASON, James (actor); Huddersfield, Eng., May 15, 1909.
- MASSEY, Raymond (actor); Toronto, Ont., Can., Aug. 30, 1896.
- MASSEY, Vincent (Canadian statesman); Toronto, Ont., Can., Feb. 20, 1887.
- MASSINE, Léonide (choreographer); Moscow, Rus., Aug. 9, 1896.
- MATHIAS, Bob (athlete); Tulare, Calif., Mar. 17, 1930.
- MATHIS, Johnny (singer); San Francisco, Calif., Sept. 30, 1935.
- MATTHEWS, Ed (Edwin) (baseball player); Texarkana, Tex., Oct. 13, 1931.
- MATURE, Victor (actor); Louisville, Ky., Jan. 19, 1916.
- MAUGHAM, William Somerset (novelist); Paris, Fr., Jan. 25, 1874.
- MAURIAC, Francois (novelist); Bordeaux, France, Oct. 11, 1885.
- MAUROIS, André (Emile Herzog) (novelist); Elbeuf, Fr., July 26, 1885.
- MAXWELL, Elsa (columnist); Keokuk, Ia., May 24, 1883.
- MAYER, Dick (golfer); Stamford, Conn., Apr. 29, 1922.
- MAYNOR, Dorothy (soprano); Norfolk, Eng., Sept. 3, 1910.
- MAYS, Willie (baseball player); Fairfield, Ala., May 6, 1931.
- McBRIDE, Mary Margaret (author); Peoria, Mo., Nov. 16, 1899.
- McCAREY, Leo (movie director); Los Angeles, Calif., Oct. 3, 1898.
- McCARTHY, Joe (baseball manager); Philadelphia, Pa., Apr. 21, 1887.
- McCLOY, John J. (banker); Philadelphia, Pa., Mar. 31, 1895.
- McCORMACK, Patty (actress); New York City, Aug. 21, 1945.
- McCREA, Joel (actor); Los Angeles, Calif., Nov. 5, 1906.
- McDONALD, David J. (labor leader); Pittsburgh, Pa., Nov. 22, 1902.
- McDONALD, Marie (Marie Frye) (actress); Burgin, Ky.
- McDOWALL, Roddy (actor); London, Eng., Sept. 17, 1928.
- McGEE, Fibber (James Jordan) (actor); Peoria, Ill., Nov. 16, 1896.
- McGEE, Molly (Marion Jordan) (actress); Peoria, Ill., Apr. 15, 1898.
- McGUIRE, Dorothy (actress); Omaha, Neb., June 14, 1919.

- A, Slobhan (actress); Belfast, Ire., 4, 1923.
- Margaret (anthropologist); Philadel-
Pa., Dec. 16, 1901.
- George (labor leader); New York
Aug. 16, 1894.
- Harold R. (U. S. jurist); Brook-
Y., Feb. 16, 1888.
- Ralph (Ralph Rathgeber) (actor);
apolis, Minn., Nov. 21, 1920.
- olda (Golda Myerson) (Israeli states-
n); Kiev, Rus.
- R, Lise (physicist); Vienna, Aus.,
1878.
- FRANCE, Pierre (French states-
Paris, Fr., Jan. 11, 1905.
- Adolphe (actor); Pittsburgh, Pa.,
8, 1890.
- I, Gian-Carlo (composer); Cadegli-
t., July 7, 1911.
- N, Yehudi (violinist); New York
Apr. 22, 1916.
- S, Robert Gordon (Prime Minister,
lia); Jeparit, Australia, Dec. 20, 1894.
- Johnny (singer & song writer);
nah, Ga., Nov. 18, 1909.
- TH, Burgess (actor); Cleveland, Ohio,
6, 1908.
- l, Ethel (Ethel Zimmerman) (ac-
& singer); Astoria, N. Y., Jan. 16,
- Robert (baritone); Brooklyn,
June 4, 1919.
- Thomas (poet & religious writer);
Fr., Jan. 31, 1915.
- Perle (hostess); Sturgis, Mich., 1891.
- VIĆ, Ivan (sculptor); Vrpolje, Yugos.,
5, 1883.
- OUS, Grace (author); Manchester,
Sept. 8, 1924.
- ER, James A. (novelist); New York
Feb. 3, 1907.
- COFF, Cary (golfer); Halls, Tenn.,
1921.
- ER, Jo (stage designer); Paris, Fr.,
9, 1901.
- N, Anastas I. (Soviet statesman);
Armenia, Nov. 25, 1895.
- V, Zinka (soprano); Zagreb, Yugos.,
7, 1908.
- D, Darius (composer); Aix-en-Prov-
Fr., Sept. 4, 1892.
- D, Ray (actor); Neath, Wales, Jan.
- Arthur (dramatist); New York City,
- Gilbert (theatrical producer); New
City, July 3, 1884.
- Mitch (Mitchell) (musician); Ro-
N. Y., July 4, 1911.
- N, Nathan (violinist); Odessa, Russ.,
1904.
- Sal (actor-singer); New York City,
1939.
- I, Vincente (movie director); Chi-
ll., Feb. 28.
- an (painter); Barcelona, Sp., Apr.
- L, Guy (singer); Detroit, Mich.,
1927.
- MITCHELL, Thomas (actor); Elizabeth, N. J.,
July 11, 1895.
- MITCHUM, Robert (actor); Bridgeport, Conn.,
Aug. 6, 1917.
- MITROPOULOS, Dimitri (orchestra conduc-
tor); Athens, Gr., Feb. 18, 1896.
- MOISEWITSCH, Benno (pianist); Odessa,
Rus., Feb. 22, 1890.
- MOLLET, Guy (French statesman); Flers,
Orne, Fr., Dec. 31, 1905.
- MOLOTOV, Vyacheslav M. (V. M. Skryabin)
(Soviet statesman); Kukarka, Rus., Mar. 9,
1890.
- MONK, Thelonious (jazz musician); New
York City, Oct. 10, 1920.
- MONROE, Marilyn (Norma Jean Mortenson)
(actress); Los Angeles, June 1, 1926.
- MONROE, Vaughn (band leader); Akron,
Ohio, Oct. 7, 1912.
- MONSARRAT, Nicholas (novelist); Liverpool,
Eng., Mar. 22, 1910.
- MONTALBAN, Ricardo (actor); Mexico City,
Mex., Nov. 25.
- MONTEUX, Pierre (orchestra conductor);
Paris, Fr., Apr. 4, 1875.
- MONTGOMERY, Robert (Henry, Jr.) (actor);
Beacon, N. Y., May 21, 1904.
- MONTGOMERY OF ALAMEIN, 1st Viscount of
Hindhead (Sir Bernard Law Montgomery)
(British field marshal); Donegal, Ire., Nov.
17, 1887.
- MOORE, Archie (boxer); Collinsville, Ill., Dec.
13, 1916.
- MOORE, Garry (Thomas Garrison Morfit)
(comedian); Baltimore, Md., Jan. 31, 1915.
- MOORE, Henry (sculptor); Castleford, Eng.,
July 30, 1898.
- MOORE, Marianne (poet); Kirkwood, Mo.,
Nov. 15, 1887.
- MOORE, Terry (Helen Koford) (actress); Los
Angeles, Calif., Jan. 7, 1929.
- MOORE, Victor (actor); Hammonton, N. J.,
Feb. 24, 1876.
- MOOREHEAD, Agnes (actress); Clinton, Mass.,
Dec. 6, 1906.
- MORINI, Erica (violinist); Vienna, Aus., Jan.
5, 1910.
- MORLEY, Robert (actor); Wiltshire, Eng.,
May 26, 1908.
- MOSES, Grandma (Anna Mary Robertson)
(painter); Greenwich, N. Y., Sept. 7, 1860.
- MOSES, Robert (NYC public official); New
Haven, Conn., Dec. 18, 1888.
- MUMFORD, Lewis (author); Flushing, N. Y.,
Oct. 19, 1895.
- MUNCHE, Charles (orchestra conductor);
Strasbourg, Ger., Sept. 1891.
- MUNI, Paul (Muni Weisenfreund) (actor);
Lemberg, Aus., Sept. 22, 1895.
- MUNSEL, Patrice (soprano); Spokane, Wash.,
May 14, 1925.
- MURPHY, George (actor); New Haven, Conn.,
July 4, 1904.
- MURRAY, Arthur (dancing teacher); New
York City, Apr. 4, 1895.
- MURRAY, Ken (Don Court) (actor); New
York City, July 14, 1903.
- MURRAY, Thomas E. (business executive);
Albany, N. Y., June 20, 1891.
- MURROW, Edward R. (radio commentator);
Greensboro, N. C.

MUSIAL, Stan (baseball player); Donora, Pa., Nov. 21, 1920.

NAISH, J. Carrol (actor); New York City, Jan. 21, 1900.

NASH, Ogden (poet); Rye, N. Y., Aug. 19, 1902.

NASSER, Gamal Abdel (President, Egypt); Egypt, c.1918.

NATWICK, Mildred (actress); Baltimore, Md., June 19, 1908.

NEHRU, Jawaharlal (Prime Minister, India); Allahabad, India, Nov. 14, 1889.

NELSON, David (actor); Oct. 24, 1936.

NELSON, John Byron, Jr. (golfer); Fort Worth, Tex., Feb. 4, 1912.

NELSON, Harriet Hillard (Peggy Lou Snyder) (actress & singer); Des Moines, Iowa.

NELSON, Ozzie (Oswald) (actor & band leader); Jersey City, N. J., 1906.

NELSON, Ricky (Eric) (actor & singer); Teaneck, N. J., May 8, 1940.

NENNI, Pietro (Italian Socialist leader); Faenza, It., Feb. 9, 1891.

NEVINS, Allan (historian); Camp Point, Ill., May 20, 1890.

NEWCOMBE, Don (baseball player); Madison, N. J., July 14, 1926.

NEWHOUSE, Samuel I. (newspaperman); New York City, May 24, 1895.

NEWMAN, Paul (actor); Cleveland, Ohio, Jan. 26, 1925.

NGO Dinh Diem (President, Rep. of Vietnam); Quang Binh, Annam, 1901.

NIEBUHR, Reinhold (theologian); Wright City, Mo., June 21, 1892.

NILSSON, Birgit (soprano); West Karup, Sweden, May 17, 1923.

NIVEN, David (actor); Kirriemuir, Scot., Mar. 1, 1910.

NIXON, Richard M. (Vice President, U. S.); Yorba Linda, Calif., Jan. 9, 1913.

NKRUMAH, Kwame (Prime Minister, Ghana); Nkroful, Br. W. Af., 1909.

NOGUCHI, Isamu (sculptor); Los Angeles, Calif., Nov. 7, 1904.

NOLAN, Lloyd (actor); San Francisco, Calif., Aug. 11, 1902.

NORRIS, Kathleen (novelist); San Francisco, Calif., July 16, 1880.

NORSTAD, Gen. Lauris (Supr. Comdr. NATO); Minneapolis, Minn., Mar. 24, 1907.

NOVAES, Guiomar (pianist); São João de Boa Vista, Braz., Feb. 28, 1895.

NOVAK, Kim (Marilyn Novak) (actress); Chicago, Ill., Feb. 13, 1933.

NOVOTNA, Jarmila (soprano); Prague, Czechoslovakia, Sept. 23, 1911.

NUGENT, Elliott (author, actor & director); Dover, Ohio, Sept. 20, 1899.

OBBERON, Merle (Merle O'Brien Thompson) (actress); Tasmania, Feb. 19, 1911.

O'BRIAN, Hugh (Hugh J. Krampe) (actor); Rochester, N. Y., Apr. 19, 1925.

O'BRIEN, Edmond (actor); New York City, Sept. 10, 1915.

O'BRIEN, Margaret (Angela Maxine O'Brien) (actress); San Diego, California, Jan. 15, 1937.

O'BRIEN, Pat (actor); Milwaukee, Wis., Nov. 11, 1899.

O'CASEY, Sean (dramatist); Dublin, 1881.

O'CONNOR, Donald (actor); Chicago, Aug. 28, 1925.

ODETS, Clifford (dramatist); Philadelphia, Pa., July 18, 1906.

O'HARA, John (novelist); Pottsville, Pa., 31, 1905.

O'HARA, Maureen (Maureen FitzSimons) (tress); Dublin, Ire., Aug. 17, 1921.

OISTRACH, David (violinist); Odessa, R., 1908.

O'KEEFE, Georgia (painter); Sun Prairie, Wis., Nov. 15, 1887.

O'KELLY, Sean T. (Irish statesman); Limerick, Ire., Aug. 25, 1882.

OLAF V (King, Norway); Sandringham, Eng., July 2, 1903.

OLIVIER, Sir Laurence (actor); Dorking, Eng., May 22, 1907.

OPPENHEIMER, J. Robert (physicist); New York City, Apr. 22, 1904.

ORMANDY, Eugene (orchestra conductor); Budapest, Hung., Nov. 18, 1899.

OSBORN, Paul (playwright); Evansville, Ind., Sept. 4, 1901.

OSBORNE, John (dramatist); London, Eng., Dec. 12, 1929.

OUMET, Francis D. (golfer); Brookline, Mass., May 8, 1893.

OWENS, Jesse (sprinter); Decatur, Ala., 12, 1913.

PAAR, Jack (comedian); Canton, Ohio, 1, 1918.

PAGE, Geraldine (actress); Kirksville, Mo., Nov. 22, 1924.

PAGE, Patti (Clara Ann Fowler) (singer); Claremore, Okla., 1927.

PALANCE, Jack (actor); Latimer, Pa., 18, 1920.

PALEY, William S. (broadcasting executive); Chicago, Ill., Sept. 28, 1901.

PALMER, Arnold (golfer); Youngstown, Ohio, Sept. 10, 1929.

PALMER, Lilli (actress); Posen, Germany, May 27, 1917.

PARKER, Dorothy (poet & story writer); Vero Beach, Fla., Aug. 22, 1893.

PARKER, Eleanor (actress); Cedarville, Ohio, June 26, 1922.

PARSONS, Louella O. (columnist); Freeport, Ill., Aug. 6, 1893.

PASTERNAK, Joseph (movie producer); Nagy-Somlyo, Rum., Sept. 19, 1901.

PATTERSON, Floyd (boxer); Waco, Tex., Jan. 4, 1935.

PAUL I (King, Greece); Athens, Greece, 14, 1901.

PAULING, Linus Carl (chemist); Portland, Oreg., Feb. 28, 1901.

PEALE, Norman Vincent (clergyman & author); Bowersville, Ohio, May 31, 1891.

PEARSON, Drew (columnist); Evanston, Ill., Dec. 13, 1897.

PEARSON, Hesketh (author); Hawaii, Worces., Eng., Feb. 20, 1887.

PEARSON, Lester B. (Canadian statesman); Toronto, Ont., Can., Apr. 23, 1897.

PEATIE, Donald Culross (nature writer); Chicago, Ill., June 21, 1898.

- Gregory (actor); La Jolla, Calif., Apr. 5.
- Jan (tenor); New York City, 1904.
- Westbrook (columnist); Minn., Aug. 2, 1894.
- AN, S. J. (Sidney J.); (humorist); Lyn, N. Y., Feb. 1, 1904.
- S, Tony (Anthony) (actor); New City, Apr. 14, 1932.
- Juan D. (former President, Argentina), Lobos, Arg., Oct. 8, 1895.
- Roberta (Roberta Peterman) (singer); New York City, May 4, 1930.
- Egon (pianist); Hanover, Ger., Mar. 1.
- O, James C. (labor leader); Chicago, Mar. 16, 1892.
- (Philip Mountbatten) (Duke of Edinburgh); Corfu, June 10, 1921.
- Edith (singer); Paris, France, Dec. 5.
- RSKY, Gregor (cellist); Ekaterinorus., Apr. 17, 1903.
- , Pablo (painter); Málaga, Sp., Oct. 1.
- , Auguste (physicist); Basel, Switz., 8, 1884.
- , Jean Félix (aeronautics engineer); Switz., Jan. 28, 1884.
- D, Mary (Gladys Mary Smith) (actress); Toronto, Can., Apr. 8, 1893.
- , Walter (actor); East St. John, Can., Sept. 23, 1898.
- Billy (baseball player); Detroit, Apr. 2, 1927.
- asu (actress); Parsons, Kans., Jan. 1.
- Johnny (baseball player); Wither., Y., Sept. 30, 1932.
- Sidney (actor); Miami, Fla., Feb. 1.
- lly (soprano); Cannes, Fr., Apr. 13,
- Cole (song writer); Peru, Ind., June 1.
- Katherine Anne (story writer); In-creek, Tex., May 15, 1894.
- C, Francis (composer); Paris, Fr., 1899.
- Dick (actor); Mt. View, Ark., Nov. 4.
- William (actor); Pittsburgh, Pa., 9, 1892.
- ER, Otto (movie producer & director); Vienna, Aus., Dec. 5, 1906.
- , Elvis (singer); Tupelo, Miss., Jan. 1.
- , Robert (Robert Preston Meservey) (actor); Newton Highlands, Mass., 1918.
- George (cartoonist); Coytesville, N. J., 1901.
- incent (actor); St. Louis, Mo., May 1.
- EY, J. B. (John B.) (novelist & actor); Bradford, Eng., Sept. 13, 1894.
- E, William (violinist); Glasgow, Scot., 3, 1904.
- Nathan M. (educator); Council Iowa, Apr. 4, 1907.
- QUASIMODO, Salvatore (poet); Modica, Italy, Aug. 20, 1901.
- QUINN, Anthony (actor); Chihuahua, Mex., Apr. 21, 1916.
- RABI, Isidor (physicist); Austria, July 29, 1898.
- RAFT, George (actor); New York City, Sept. 27, 19??.
- RAINIER III (Sovereign Prince of Monaco); Monaco, May 31, 1923.
- RAINS, Claude (actor); London, Eng., Nov. 10, 1889.
- RANK, J. Arthur (movie producer); Hull, Eng., Dec. 23, 1888.
- RATHBONE, Basil (actor); Johannesburg, So. Af., June 13, 1892.
- RATOFF, Gregory (movie director); St. Petersburg, Rus., Apr. 20, 1897.
- RATTIGAN, Terence (dramatist); London, Eng., June 10, 1911.
- RAWLS, Betsy (golfer); Spartanburg, S. C., May 4, 1928.
- RAY, Johnnie (singer); Roseburg, Oreg., Jan. 10, 1927.
- RAYBURN, Sam (Speaker of House, U. S.); Roane Co., Tenn., Jan. 6, 1882.
- RAYE, Martha (Margie Yvonne Reed) (actress); Butte, Mont., Aug. 27, 1916.
- REAGAN, Ronald (actor); Tampico, Ill., Feb. 6, 1911.
- REDGRAVE, Michael (actor); Bristol, Eng., Mar. 20, 1908.
- REESE, Pee Wee (Harold) (baseball player); Ekron, Ky., July 23, 1919.
- REID, Helen Rogers (publisher); Appleton, Wis., Nov. 23, 1882.
- REINER, Carl (actor); New York City, Mar. 20, 1922.
- REINER, Fritz (orchestra conductor); Budapest, Hung., Dec. 19, 1888.
- REMARQUE, Erich Maria (novelist); Osnabrück, Ger., June 22, 1898.
- REMICK, Lee (Ann) (actress); Quincy, Mass., Dec. 14, 1935.
- RENNIE, Michael (actor); Bradford, Yorks., Eng., Aug. 25, 1909.
- RESTON, James (journalist); Clydebank, Scot., Nov. 3, 1909.
- REUTHER, Walter P. (labor leader); Wheeling, W. Va., Sept. 1, 1907.
- REYNOLDS, Debbie (Mary Frances Reynolds) (actress); El Paso, Tex., Apr. 1, 1932.
- RHEE, Syngman (ex-President, South Korea); Seoul, Kor., Mar. 26, 1875.
- RICE, Elmer (Elmer Reizenstein) (dramatist); New York City, Sept. 28, 1892.
- RICHARD, Maurice (hockey player); Montreal, Que., Can., Aug. 4, 1921.
- RICHARDS, Paul (baseball manager); Waxahachie, Tex., Nov. 21, 1908.
- RICHARDSON, Sir Ralph (actor); Cheltenham, Glos., Eng., Dec. 19, 1902.
- RICKENBACKER, Eddie (Edward V.) (airline executive); Columbus, Ohio, Oct. 8, 1890.
- RICKEY, Branch (baseball executive); Stockdale, Ohio, Dec. 20, 1881.
- RICKOVER, Vice Adm. Hyman G. (U. S. naval officer); Russia, Jan. 27, 1900.
- RIDGWAY, Gen. Matthew B. (U. S. Army officer); Ft. Monroe, Va., Mar. 3, 1895.

- RITCHARD, Cyril (actor); Sydney, Australia, Dec. 1, 1898.
- RITTER, Thelma (actress); Brooklyn, N. Y., Feb. 14, 1905.
- RIZZUTO, Phil (baseball player and announcer); New York City, Sept. 25, 1918.
- ROARK, Helen Wills Moody (tennis player); Centerville, Calif., Oct. 6, 1905.
- ROBBINS, Jerome (Jerome Rabinowitz) (choreographer); NYC, Oct. 11, 1918.
- ROBERTS, Robin (baseball player); Springfield, Ill., Sept. 30, 1926.
- ROBESON, Paul (baritone); Princeton, N. J., Apr. 9, 1898.
- ROBINSON, Edward G. (Emanuel Goldenberg) (actor); Bucharest, Rum., Dec. 12, 1893.
- ROBINSON, Frank (baseball player); Beaumont, Tex., Aug. 31, 1935.
- ROBINSON, Jackie (baseball player); Cairo, Ga., Jan. 31, 1919.
- ROBINSON, Ray (boxer); Detroit, Mich., May 3, 1920.
- ROBSON, Flora (actress); South Shields, Eng., Mar. 28, 1902.
- ROCHESTER (Eddie Anderson) (comedian); Oakland, Calif., Sept. 18, 1905.
- ROCKEFELLER, David (business executive); New York City, June 12, 1915.
- ROCKEFELLER, John D., 3rd (business executive); New York City, Mar. 21, 1906.
- ROCKEFELLER, Laurance S. (business executive); New York City, May 26, 1910.
- ROCKEFELLER, Winthrop (business executive); New York City, May 1, 1912.
- ROCKWELL, Norman (illustrator); New York City, Feb. 3, 1894.
- RODGERS, Richard (song writer); New York City, June 28, 1902.
- ROGERS, Buddy (Charles) (actor); Olathe, Kans., Aug. 13, 1904.
- ROGERS, Ginger (Virginia McMath) (actress); Independence, Mo., July 16, 1911.
- ROGERS, Roy (Leonard Slye) (actor); Cincinnati, Ohio, Nov. 5, 1912.
- ROGERS, Will, Jr. (actor); New York City, Oct. 20, 1911.
- ROMAINS, Jules (Louis Farigoule) (novelist); Saint-Julien Chapeuill, Fr., Aug. 26, 1885.
- ROME, Harold (song writer); Hartford, Conn., May 27, 1908.
- ROMERO, Cesar (actor); New York City, Feb. 15, 1907.
- ROMULO, Carlos P. (Philippine statesman); Manila, Phil., Jan. 14, 1899.
- ROONEY, Mickey (Joe Yule, Jr.) (actor); Brooklyn, N. Y., Sept. 23, 1922.
- ROOSEVELT, Eleanor (U. S. stateswoman); New York City, Oct. 11, 1884.
- ROSE, Billy (William S. Rosenberg) (stage producer); New York City, September 6, 1898.
- ROSEWALL, Ken (tennis player); Sydney, NSW, Australia, Nov. 2, 1934.
- ROSSELLINI, Roberto (movie director); Rome, It., May 8, 1906.
- RUBINSTEIN, Artur (pianist); Warsaw, Pol., Jan. 28, 1889.
- RUDOLPH, Wilma Glodean (sprinter); St. Bethlehem, Tenn., June 23, 1940.
- RUGGLES, Charles (actor); Los Angeles, Calif., Feb. 8, 1892.
- RUSSELL, Bertrand (philosopher); Trelkington, Eng., May 18, 1872.
- RUSSELL, Jane (actress); Bemidji, Minn., June 21, 1921.
- RUSSELL, Rosalind (actress); Waterbury, Conn., June 4, 1912.
- RYAN, Robert (actor); Chicago, Ill., Nov. 1913.
- SAHL, Mort (Morton Lyon Sahl) (comedian); Montreal, Canada, May 11, 1927.
- SAINT, Eva Marie (actress); Newark, N. J., July 4, 1924.
- ST. DENIS, Ruth (Ruth Denis) (dancer); Newark, N. J., Jan. 20, 1880.
- ST. LAURENT, Louis S. (Canadian statesman); Compton, Que., Can., Feb. 1, 1880.
- SALAZAR, António de Oliveira (Prime Minister of Portugal); Santa Comba, Port., 1889.
- SALINGER, J. D. (novelist); New York City, Jan. 1, 1919.
- SALK, Jonas (physician); New York City, Oct. 28, 1914.
- SANDBURG, Carl (poet & biographer); Germantown, Ill., Jan. 6, 1878.
- SANDE, Earl (horse trainer); Groton, S. I., Nov. 19, 1898.
- SANDERS, George (actor); St. Petersburg, Rus., 1906.
- SANDS, Tommy (singer); Chicago, Ill., 1937.
- SARAZEN, Gene (golfer); Harrison, N. J., Feb. 27, 1902.
- SARNOFF, David (radio executive); Uzbork, Rus., Feb. 27, 1891.
- SAROYAN, William (story writer & dramatist); Fresno, Calif., Aug. 31, 1908.
- SARTRE, Jean-Paul (philosopher); Paris, France, June 21, 1905.
- SAYÃO, Bidú (soprano); Rio de Janeiro, Braz., May 11, 1906.
- SCHAEFER, Jake (billiards player); Chicago, Ill., Oct. 18, 1894.
- SCHARY, Dore (movie producer); New York City, N. J., Aug. 31, 1905.
- SCHAEFFING, Bob (Robert) (baseball player); Overland, Mo., Aug. 11, 1915.
- SCHALL, Maria (actress); Vienna, 1926.
- SCHIAPARELLI, Elsa (fashion designer); Rome, It.
- SCHILDKRAUT, Joseph (actor); Vienna, Austria, Mar. 22, 1895.
- SCHIPA, Tito (tenor); Lecce, It., Jan. 1890.
- SCHLESINGER, Arthur M., Jr. (historian); Columbus, Ohio, Oct. 15, 1917.
- SCHLESINGER, Arthur M., Sr. (historian); Xenia, Ohio, Feb. 27, 1888.
- SCHOENDIENST, Al (Albert) (baseball player); Germantown, Ill., Feb. 2, 1920.
- SCHULBERG, Budd (novelist); New York City, Mar. 27, 1914.
- SCHUMAN, William (composer); New York City, Aug. 4, 1910.
- SCHWARZKOPF, Elisabeth (soprano); Juchschin, Posen, Ger., Dec. 9, 1915.
- SCHWEITZER, Albert (physician & philosopher); Kaysersburg, Alsace, Jan. 14, 1875.
- SCORE, Herb (baseball player); Rosemead, N. Y., June 7, 1933.

ted Persons

- Barbara Ann (skater); Ottawa, Can., 9, 1928.
- Hazel (pianist); Port of Spain, Trin., 11, 1920.
- Randolph (actor); Orange Co., Va., 23, 1903.
- Zachary (actor); Austin, Tex., Feb. 14.
- IG, Glenn T. (nuclear chemist); Ish-
ing, Mich., Apr. 19, 1912.
- AN, Frank (tennis player); Mont
t, Victoria, Austr., Oct. 29, 1927.
- A, Andrés (guitarist); Linares, Sp.,
18, 1894.
- , Francisco (tennis player); Guay-
Ec., June 20, 1921.
- E. Victor, Jr. (tennis player); Phil-
dia, Pa., Aug. 30, 1923.
- S, Peter (actor); Southsea, England,
8, 1925.
- CK, David O. (movie producer); Pitts-
Pa., May 10, 1902.
- , Rudolf (pianist); Eger, Boh., Mar.
03.
- G, Rod (playwright); Syracuse, N. Y.,
5, 1924.
- JS, Roger (composer); Brooklyn, N. Y.
18, 1896.
- ID, Eric (news commentator); Velve,
Nov. 26, 1912.
- , Bobby (baseball player); Potts-
Pa., Sept. 26, 1925.
- Y, Harlow (astronomer); Nashville,
Nov. 2, 1885.
- T, Moshé (Moshé Shertok) (Israeli
man); Kherson, Rus., Oct. 3, 1894.
- NESSY, Frank J. (baseball execu-
Albion, Ill., Apr. 8, 1885.
- Artie (clarinetist); New York City,
23, 1910.
- Irwin (dramatist & novelist); New
City, Feb. 27, 1913.
- R, Moira (Moira Shearer King)
rina); Dunfermline, Fife, Scot., Jan.
26.
- , Vincent (novelist & essayist); Pana,
ec. 5, 1899.
- Fulton J. (clergyman & author);
o, Ill., May 8, 1895.
- AN, Ann (actress); Denton, Tex., Feb.
5.
- F, Robert (dramatist); Kingston-on-
s, Eng., June 6, 1896.
- KER, Willie (jockey); Fabens, Tex.,
9, 1931.
- HOV, Mikhail (novelist); Veshens-
Rus., May 24, 1905.
- Dinah (singer); Winchester, Tenn.,
, 1917.
- KOVICH, Dmitri (composer); St.
ourg, Rus., Sept. 26, 1906.
- N, Max (humorist); St. Paul, Minn.,
4, 1919.
- W, Herman (theatrical producer);
1, Colo., Dec. 6, 1898.
- T, Simone (Simone Kaminker) (ac-
Wiesbaden, Germany, Mar. 25, 1921.
- Y, Igor I. (aircraft designer); Kiev,
May 25, 1889.
- Ignazio (Secondo Tranquilli) (novel-
escina del Marai, It., May 1, 1900.
- SILVERS, Phil (Phillip Silversmith) (come-
dian); Brooklyn, N. Y., May 11, 1912.
- SIMENON, Georges (Georges Sim) (novelist);
Liège, Belg., Feb. 13, 1903.
- SIMMONS, Jean (actress); Crouch Hill, Lon-
don, Eng., Jan. 31, 1929.
- SIMONSON, Lee (stage designer); New York
City, June 26, 1888.
- SINATRA, Frank (singer & actor); Hoboken,
N. J., Dec. 12, 1917.
- SINCLAIR, Upton (novelist); Baltimore, Md.,
Sept. 20, 1878.
- SIQUEIROŚ, David (painter); Chihuahua,
Mex., Dec. 29, 1896.
- SITWELL, Dame Edith (poet); Scarborough,
Eng., 1887.
- SITWELL, Sir Osbert (poet & satirist); Lon-
don, Eng., Dec. 6, 1892.
- SKELTON, Red (Richard) (comedian); Vin-
cennes, Ind., July 18, 1913.
- SKINNER, Cornelia Otis (actress); Chicago,
Ill., May 30, 1901.
- SLAUGHTER, Enos (baseball player); Rox-
boro, N. C., Apr. 27, 1916.
- SLEZAK, Walter (actor); Vienna, Aus., May
3, 1902.
- SLOAN, Alfred P., Jr. (business executive);
New Haven, Conn., May 23, 1875.
- SMITH, H. Allen (humorist); McLeansboro,
Ill., Dec. 19, 1907.
- SMITH, Howard K. (news commentator); Fer-
riday, La., May 12, 1914.
- SMITH, Kate (Kathryn) (singer); Greenville,
Mo., May 1, 1909.
- SMITH, Lillian (novelist); Jasper, Florida,
1897.
- SMITH, Red (Walter) (sports writer); Green
Bay, Wis., Sept. 25, 1905.
- SMYTHE, Conn (hockey executive); Toronto,
Ont., Can., Feb. 1, 1895.
- SNEAD, Sam (golfer); Hot Springs, Va., May
27, 1912.
- SNIDER, Duke (Edwin) (baseball player);
Los Angeles, Calif., Sept. 19, 1926.
- SOTHERN, Ann (Harriette Lake) (actress);
Valley City, N. Dak., Jan. 22, 1911.
- SOUSTELLE, Jacques (French govt. official);
Montpellier, Hérault, Fr., Feb. 3, 1912.
- SPAAK, Paul Henri (Belgian statesman);
Brussels, Belg., Jan. 25, 1899.
- SPAHN, Warren (baseball player); Buffalo,
N. Y., Apr. 23, 1921.
- SPENDER, Stephen (poet); nr. London, Eng.,
Feb. 28, 1909.
- SPEWACK, Bella (dramatist); Hungary, 1899.
- SPEWACK, Sam (dramatist); Russia, 1899.
- SPILLANE, Mickey (Frank Spillane) (novel-
ist); Brooklyn, N. Y., Mar. 9, 1918.
- SPOCK, Benjamin (pediatrician); New
Haven, Conn., May 2, 1903.
- SPROUL, Robert G. (educator); San Fran-
cisco, Calif., May 22, 1891.
- STAGG, A. Alonzo (football coach); West
Orange, N. J., Aug. 16, 1862.
- STANLEY, Kim (Patricia Reid) (actress);
Tularosa, N. Mex., Feb. 11, 1925.
- STANWYCK, Barbara (Ruby Stevens) (ac-
tress); Brooklyn, N. Y., July 16, 1907.
- STARR, Kay (Starks) (singer); Dougherty,
Okla., July 21, 1922.
- STASSEN, Harold E. (U. S. administrator);
West St. Paul, Minn., Apr. 13, 1907.

- STEBER, Eleanor (soprano); Wheeling, W. Va., July 17, 1916.
- STEFANSSON, Vilhjalmur (explorer); Arnes, Can., Nov. 3, 1879.
- STEICHEN, Edward (photographer); Luxembourg, May 27, 1879.
- STEIGER, Rod (actor); Westhampton, N. Y., Apr. 14, 1925.
- STEINBECK, John (novelist); Salinas, Calif., Feb. 27, 1902.
- STEINBERG, Saul (cartoonist); Ramnic-Sarat, Rum., June 15, 1914.
- STENGEL, Casey (Charles D.) (baseball manager); Kansas City, Mo., July 30, 1891.
- STERN, Isaac (violinist); Kreminiec, Rus., July 21, 1920.
- STEVENS, George (movie producer); Oakland, Calif., 1905.
- STEVENS, Mark (actor); Cleveland, Ohio, Dec. 13.
- STEVENS, Risë (mezzo-soprano); New York City, June 11, 1913.
- STEVENSON, Adlai E. (U. S. statesman); Los Angeles, Calif., Feb. 5, 1900.
- STEWART, James (actor); Indiana, Pa., May 20, 1908.
- STICKNEY, Dorothy (actress); Dickinson, N. Dak., June 21, 1900.
- STOKOWSKI, Leopold (orchestra conductor); London, Eng., Apr. 18, 1882.
- STONE, Edward D. (architect); Fayetteville, Ark., Mar. 9, 1902.
- STRANAHAN, Frank R. (golfer); Toledo, Ohio, Aug. 5, 1922.
- STRASBERG, Susan (actress); New York City, May 22, 1938.
- STRAUSS, Lewis L. (former AEC Chmn., U. S.); Charleston, W. Va., Jan. 31, 1896.
- STRAVINSKY, Igor (composer); Oranienbaum, Rus., June 17, 1882.
- STREETER, Edward (novelist); New York City, Aug. 1, 1891.
- SUGGS, Louise (golfer); Atlanta, Ga., Sept. 7, 1923.
- SUKARNO (President and Premier, Indonesia); Surabaya, Java, 1901.
- SULLIVAN, Barry (Patrick Barry) (actor); New York City, Aug. 29, 1912.
- SULLIVAN, Ed (columnist & TV performer); New York City, Sept. 28, 1902.
- SULLIVAN, Frank (humorist); Saratoga Springs, N. Y., Sept. 22, 1892.
- SULZBERGER, Arthur H. (publisher); New York City, Sept. 12, 1891.
- SUMAC, Yma (Zolla Imperatriz Chavarri Sumac del Castillo) (singer); Ichocan, Peru, Sept. 10, 1927.
- SUZUKI, Pat (singer); Cressey, Calif.
- SWANSON, Gloria (Josephine Swenson) (actress); Chicago, Ill., Mar. 27, 1898.
- SWARTHOUT, Gladys (mezzo-soprano); Deepwater, Mo., Dec. 25, 1904.
- SZELL, George (orchestra conductor); Budapest, Hung., June 7, 1897.
- SZIGETI, Joseph (violinist); Budapest, Hung., Sept. 5, 1892.
- TALBERT, Billy (tennis player); Cincinnati, Ohio, Sept. 4, 1918.
- TALBURT, Harold M. (cartoonist); Toledo, Ohio, Feb. 19, 1895.
- TALLCHIEF, Maria (ballerina); Fairfax, Va., Jan. 24, 1925.
- TANDY, Jessica (actress); London, Eng., June 7, 1909.
- TATE, Allen (poet); Winchester, Ky., Nov. 19, 1899.
- TAYLOR, Deems (composer); New York City, Dec. 22, 1885.
- TAYLOR, Elizabeth (actress); London, Eng., Feb. 27, 1932.
- TAYLOR, Harold (educator); Toronto, Canada, Sept. 28, 1914.
- TAYLOR, Gen. Maxwell D. (U. S. Army officer); Keytesville, Mo., Aug. 26, 1901.
- TAYLOR, Robert (S. Arlington Brush) (actor); Filley, Nebr., Aug. 5, 1911.
- TEBALDI, Renata (soprano); Pesaro, Italy, Jan. 2, 1922.
- TEBBETTS, Birdie (George E.) (baseball manager); Nashua, N. H., Nov. 10, 1911.
- TELLER, Edward (physicist); Budapest, Hung., Jan. 15, 1908.
- TEMPLE, John (baseball player); Lexington, N. C., Aug. 8, 1929.
- TEMPLE, Shirley (actress); Santa Monica, Calif., Apr. 23, 1928.
- TEMPLETON, Alec (pianist); Cardiff, Wales, July 4, 1910.
- THEBOM, Blanche (mezzo-soprano); Montclair, N. J., Sept. 19, 1919.
- THOMAS, Danny (Amos Jacobs) (comedian); Deerfield, Mich., Jan. 6, 1914.
- THOMAS, Frank (baseball player); Philadelphia, Pa., June 11, 1921.
- THOMAS, Lowell (lecturer & author); Washington, Ohio, Apr. 6, 1892.
- THOMAS, Norman (Socialist leader); Marion, Ohio, Nov. 20, 1884.
- THOMPSON, Randall (composer); New York City, Apr. 21, 1899.
- THOMSON, Virgil (composer); Kansas City, Mo., Nov. 25, 1896.
- THOREZ, Maurice (Fr. Communist leader); Noyelles-Gaudault, Fr., Apr. 28, 1900.
- THORNDIKE, Dame Sybil (actress); Gainsborough, Lincs., Eng., Oct. 24, 1882.
- THURBER, James (humorist); Columbus, Ohio, Dec. 8, 1894.
- TIERNEY, Gene (actress); Brooklyn, N. Y., Nov. 20, 1920.
- TILLICH, Paul (theologian); Starze, Prussia, Kreis Guben, Prussia, Aug. 20, 1886.
- TITO (Josip Brozovich or Broz) (President, Yugoslavia); Croatia, May 25, 1892.
- TOGLIATTI, Palmiro (Italian Communist leader); Genoa, It., Mar. 26, 1893.
- TONE, Franchot (actor); Niagara Falls, N. Y., Feb. 27, 1905.
- TOUREL, Jennie (mezzo-soprano); Montreal, Can., June 22, 1910.
- TOYNBEE, Arnold J. (historian); London, Eng., Apr. 14, 1889.
- TRABERT, Tony (tennis player); Cincinnati, Ohio, Aug. 16, 1930.
- TRACY, Spencer (actor); Milwaukee, Wis., Apr. 5, 1900.
- TRAUBEL, Helen (soprano); St. Louis, Mo., June 16, 1903.
- TRAUTMAN, George M. (baseball executive); Bucyrus, Ohio, Jan. 11, 1890.
- TRILLING, Lionel (author & educator); New York City, July 4, 1905.

- Ernest (actor); Kansas City, Mo., 19, 1890.
- LO Y MOLINA, Rafael (Dom. Rep. sman); San Cristóbal, Oct. 24, 1891.
- N, Harry S. (U. S. statesman); Lamar, May 8, 1884.
- N, Margaret (soprano); Independence, Feb. 17, 1924.
- R, Richard (tenor); New York City, 28, 1914.
- R, Sophie (Sophie Abuza) (enter-er); Russia, 1884.
- Anthony (choreographer); London, Apr. 4, 1909.
- Y, Gene (James J.) (boxer); New City, May 25, 1898.
- Y, Bob (baseball player); Troy, Ill., 19, 1930.
- R, Lana (Julia Jean Turner) (actress); ce, Idaho, Feb. 8, 1920.
- SA, Willie (golfer); Elmsford, N. Y., 20, 1915.
- G, Gen. Nathan F. (ex-Chmn., Joint s of Staff, U. S.); Monroe, Wis., Oct. 1897.
- Conway (Harold Jenkins) (singer); Point, Miss., Sept. 1, 1933.
- HT, Walter (German Communist); Leipzig, Ger., June 30, 1893.
- MEYER, Louis (poet & anthologist); York City, Oct. 1, 1885.
- Harold C. (chemist); Walkerton, Ind., 29, 1893.
- V, Peter (dramatist & actor); Lon-Eng., 1921.
- , Rudy (Hubert) (actor & band); Island Pond, Vt., July 28, 1901.
- UREN, Abigail (Mrs. Morton Phillips) nnist); Sioux City, Iowa, July 14,
- RBILT, Alfred G. (horse-racing ex-e); London, Eng., Sept. 22, 1912.
- DREN, Mark (poet & critic); Hope, une 13, 1894.
- , George P. (Gov. Gen., Canada); eal, Que., Can., Apr. 23, 1888.
- AN, Sarah (singer); Newark, N. J., 27, 1924.
- l, Gwen (actress); Culver City, Calif.
- Gore (author-dramatist); West Point, Oct. 3, 1925.
- King (movie director & producer); ston, Tex., Feb. 8, 1895.
- RAUN, Wernher (rocket engineer); z, Ger., Mar. 23, 1912.
- R, Robert (actor); Detroit, Mich., 0, 1930.
- B, Robert F. (Mayor, NYC); New City, Apr. 20, 1910.
- T, Jersey Joe (Arnold Cream)); Merchantville, N. J., Jan. 31, 1914.
- l, Mickey (boxer); Elizabeth, N. J., 3, 1901.
- , Nancy (Ann Myrtle Swoyer) (ac-Philadelphia, Pa.
- E, DeWitt (publisher); St. Paul, Nov. 12, 1889.
- E, Henry A. (U. S. statesman); Adair owa, Oct. 7, 1888.
- WALLACE, Mike (TV personality) (Myron Wallace); Brookline, Mass., May 9, 1918.
- WALTARI, Mika (novelist); Helsinki, Fin., Sept. 19, 1908.
- WALTER, Bruno (Bruno Walter Schlesinger) (conductor); Berlin, Ger., Sept. 17, 1876.
- WARD, Barbara (writer & economist); York, Eng., May 23, 1914.
- WARING, Fred (band leader); Tyrone, Pa., June 9, 1900.
- WARREN, Robert Penn (novelist); Guthrie, Ky., Apr. 24, 1905.
- WATERS, Ethel (actress & singer); Chester, Pa., Oct. 31, 1900.
- WAUGH, Alec (Alexander Raban Waugh) (novelist); London, Eng., July 8, 1898.
- WAUGH, Evelyn (novelist); London, 1903.
- WAYNE, David (David McMeekan) (actor); Traverse City, Mich., Jan. 30, 1914.
- WAYNE, John (Marion Michael Morrison) (actor); Winterset, Iowa, May 26, 1907.
- WEBB, Clifton (Webb Parmelee Hollenbeck) (actor); Indianapolis, Ind., Nov. 19, 1893.
- WEBB, Jack (actor); Santa Monica, Calif., Apr. 2, 1920.
- WEBSTER, Margaret (actress & director); New York City, Mar. 15, 1905.
- WEEDE, Robert (baritone) (Robert Wiede-feld); Baltimore, Md., Feb. 22, 1903.
- WELD, Tuesday (Susan) (actress); New York City, Aug. 27, 1943.
- WELK, Lawrence (band leader); Strasburg, N. Dak., Mar. 11, 1903.
- WELLES, Orson (actor & director); Kenosha, Wis., May 6, 1915.
- WELTY, Eudora (novelist); Jackson, Miss., Apr. 13, 1909.
- WEST, Mae (actress); Brooklyn, N. Y., Aug. 17, 1892.
- WEST, Rebecca (Cicily Fairfield) (novelist); Edinburgh, Scot., Dec. 25, 1892.
- WHITE, E. B. (Elwyn Brooks White) (writer); Mt. Vernon, N. Y., July 11, 1899.
- WHITE, Paul Dudley (physician); Roxbury, Mass., June 6, 1886.
- WHITEMAN, Paul (band leader); Denver, Colo., 1891.
- WHITING, Margaret (singer); Detroit, Mich., July 22, 1924.
- WHITNEY, C. V. (horse racing executive); New York City, Feb. 20, 1899.
- WHITNEY, John Hay (U. S. diplomat); Ellsworth, Me., Aug. 17, 1904.
- WHORF, Richard (actor); Winthrop, Mass., June 4, 1906.
- WIDENER, George D. (horse-racing execu-tive); Philadelphia, Pa., Mar. 11, 1889.
- WIDMARK, Richard (actor); Sunrise, Minn., Dec. 26, 1914.
- WILDE, Cornel (actor); New York City, Oct. 13, 1915.
- WILDER, Billy (movie director); Vienna, Aus., June 22, 1906.
- WILDER, Thornton (novelist); Madison, Wis., Apr. 17, 1897.
- WILDING, Michael (actor); Westcliff, Essex, Eng., July 23, 1912.
- WILLARD, Jess (boxer); Pottawatomie Co., Kans., Dec. 29, 1883.

- WILLIAMS, Andy** (singer); Wall Lake, Iowa, Dec. 3, 1928.
- WILLIAMS, Emlyn** (dramatist); Mostyn, Wales, Nov. 26, 1905.
- WILLIAMS, Esther** (swimmer & actress); Los Angeles, Calif., Aug. 8, 1923.
- WILLIAMS, Gluyas** (cartoonist); San Francisco, Calif., July 23, 1888.
- WILLIAMS, Ted** (baseball player); San Diego, Calif., Oct. 30, 1918.
- WILLIAMS, Tennessee** (Thomas L. Williams) (dramatist); Columbus, Miss., Mar. 26, 1914.
- WILLIAMS, William Carlos** (poet); Rutherford, N. J., Sept. 17, 1883.
- WILLSON, Meredith** (composer & actor); Mason City, Iowa, May 18, 1902.
- WILSON, Charles Erwin** (former Secretary of Defense, U. S.); Minerva, Ohio, July 18, 1890.
- WILSON, Edmund** (literary critic); Red Bank, N. J., May 8, 1895.
- WILSON, Sloan** (novelist); Norwalk, Conn., May 8, 1920.
- WINCHELL, Walter** (columnist); New York City, Apr. 7, 1897.
- WINDSOR, Duchess of** (Bessie Wallis Warfield); Blue Ridge Summit, Pa., June 19, 1896.
- WINDSOR, Duke of** (formerly King Edward VIII, Gr. Brit.); Richmond Park, Eng., June 23, 1894.
- WINTERS, Jonathan** (comedian); Dayton, Ohio, Nov. 11, 1925.
- WINTERS, Shelley** (Shirley Schrift) (actress); East St. Louis, Ill., Aug. 18, 1922.
- WOOD, Craig** (golfer); Lake Placid, N. Y., Nov. 18, 1901.
- WOODWARD, Joanne** (actress); Thomasville, Ga., Feb. 27, 1931.
- WOOLLEY, Monty** (Edgar) (actor); New York City, Aug. 17, 1888.
- WOOL, Herman** (novelist); New York City, May 27, 1915.
- WRIGHT, Richard** (novelist); New York City, Sept. 4, 1908.
- WRIGHT, Teresa** (actress); New York City, Oct. 27, 1918.
- WYATT, Jane** (actress); Campgaw, N. J., Aug. 12, 1912.
- WYETH, Andrew** (painter); Chadds Ford, Pa., July 12, 1917.
- WYLER, William** (movie director); Mulholland, Fr., July 1, 1902.
- WYLIE, Philip** (novelist); Beverly Hills, Calif., May 12, 1902.
- WYMAN, Jane** (Sarah Jane Fuls) (actress); St. Joseph, Mo., Jan. 4, 1914.
- WYNN, Ed** (Edwin Leopold) (comedian); Philadelphia, Pa., Nov. 9, 1886.
- WYNN, Keenan** (actor); New York City, N. Y., 27, 1916.
- YOUNG, Loretta** (Gretchen Young) (actress); Salt Lake City, Utah, Jan. 6, 1913.
- YOUNG, Robert** (actor); Chicago, Ill., 22, 1907.
- ZANUCK, Darryl F.** (movie director); Walla Walla, Nebr., Sept. 5, 1902.
- ZIMBALIST, Efrem** (violinist); Rostov-on-Don, Russ., Apr. 9, 1889.
- ZWEIG, Arnold** (novelist); Glogau, Silesia, Nov. 10, 1887.

★ CELEBRATED PERSONS OF THE PAST ★

For the Presidents of the United States, consult the entry Presidents in the index. For the Rulers of England, France, Germany and Russia, consult the entry Rulers. In many instances below the original name or form of the name of the individual is shown in parentheses.

- ABELARD, Peter** (Pierre Abélard) (philosopher); b. near Nantes, Fr. (1079-1142).
- ADAMS, Charles Francis** (diplomat); b. Boston, Mass. (1807-1886).
- ADAMS, Henry Brooks** (historian); b. Boston, Mass. (1838-1918).
- ADAMS, James Truslow** (historian); b. Brooklyn, N. Y. (1878-1949).
- ADAMS, Maude** (Maude Kiskadden) (actress); b. Salt Lake City, Utah (1872-1953).
- ADAMS, Samuel** (American Revolutionary patriot); b. Boston, Mass. (1722-1803).
- ADAMS, Samuel Hopkins** (novelist); b. Dunkirk, N. Y. (1871-1958).
- ADDAMS, Jane** (social worker); b. Cedarville, Ill. (1860-1935).
- ADE, George** (humorist); b. Kentland, Ind. (1866-1944).
- ADLER, Alfred** (psychoanalyst); b. Vienna, Aus. (1870-1937).
- AESCHYLUS** (dramatist); b. Eleusis, Attica (525-456 B.C.).
- AESOP** (fabulist); birthplace unknown (lived c. 600 B.C.).
- ALCOTT, Louisa May** (novelist); b. Germantown, Pa. (1832-1888).
- ALDEN, John** (American Pilgrim); b. England (1599?-1687).
- ALEXANDER the Great** (monarch & conqueror); b. Pella, Macedonia (356-323 B.C.).
- ALGER, Horatio** (author); b. Revere, Mass. (1834-1889).
- ALLEN, Ethan** (American Revolutionary soldier); b. Litchfield, Conn. (1738-1789).
- ALLEN, Fred** (John Florence Sullivan) (comedian); b. Cambridge, Mass. (1856-1956).
- ANDERSEN, Hans Christian** (fairy-tale writer); b. Odense, Den. (1805-1875).

- SON, Maxwell (dramatist); b. Atlan-
Pa. (1888-1959).
- NY, Mark (Marcus Antonius) (states-
b. Rome (83?-30 B.C.).
- NY, Susan Brownell (woman suffrag-
b. Adams, Mass. (1820-1906).
- S, St. Thomas (philosopher); b. near
no, It. (1225?-1274).
- FEDES (physicist & mathematician);
racuse, Sicily (287?-212 B.C.).
- PHANES (dramatist); b. Athens
380 B.C.).
- TLE (philosopher); b. Stagira (384-
C.).
- Benedict (American traitor); b.
ch, Conn. (1741-1801).
- b. Matthew (poet & critic); b. Lale-
Mid., Eng. (1822-1888).
- Sholem (novelist); b. Kutno, Pol.
(1857-1957).
- John Jacob (financier); b. Waldorf,
(1763-1848).
- (King of Huns, called "Scourge of
(406?-453).
- ON, John James (naturalist & artist);
Itali (1785-1851).
- Leopold (violinist & teacher); b.
rim, Hung. (1845-1930).
- INE, Saint (Aurelius Augustinus)
sopher); b. Numidia (354-430).
- US (Gaius Octavius) (Roman em-
b. Rome (63 B.C.-A.D. 14).
- d, Jane (novelist); b. Steventon,
s., Eng. (1775-1817).
- ohann Sebastian (composer); b.
ch, Ger. (1685-1750).
- Francis (philosopher & essayist);
ndon, England (1561-1626).
- Roger (philosopher & scientist); b.
ter, Som., Eng. (1214?-1294).
- ER, Karl (travel-guidebook pub-
b. Essen, Ger. (1801-1859).
- , Vasco Núñez de (explorer); b.
de los Caballeros, Sp. (1475-1517).
- , Honoré de (novelist); b. Tours,
1799-1850).
- G, Sir Frederick Grant (research phy-
b. Canada (1891-1941).
- Theda (Theodosia Goodman) (ac-
b. Cincinnati, Ohio (1890-1955).
- Y, Alben William (U. S. statesman);
aves Co., Ky. (1877-1956).
- , Phineas Taylor (showman); b.
, Conn. (1810-1891).
- Sir James Matthew (novelist &
tist); b. Kirriemuir, Forfarshire,
(1860-1937).
- Philip (dramatist); b. Rochester,
(1896-1949).
- ORE, Ethel (actress); b. Philadel-
Pa. (1879-1959).
- ORE, John (actor); b. Philadelphia,
1882-1942).
- ORE, Lionel (actor); b. Philadelphia,
1878-1954).
- , Béla (composer); b. Nagyszent-
, Transylvania, Hung. (1881-1945).
- , Clara (Clarissa Harlowe Barton)
worker); b. Oxford, Mass. (1821-
- BAUDELAIRE, Charles Pierre (poet); b. Paris,
Fr. (1821-1867).
- BECKET, Thomas à (Archbishop of Canter-
bury); b. London, Eng. (1118?-1170).
- BEDE, Saint (called "The Venerable Bede")
(scholar); b. Monkwearmouth, Eng. (673-
735).
- BEECHER, Henry Ward (clergyman); b.
Litchfield, Conn. (1813-1887).
- BEERBOHM, Sir Max (author); b. London,
Eng. (1872-1956).
- BEETHOVEN, Ludwig van (composer); b.
Bonn, Ger. (1770-1827).
- BELASCO, David (dramatist & producer); b.
San Francisco, Calif. (1854-1931).
- BELL, Alexander Graham (inventor); b.
Edinburgh, Scot. (1847-1922).
- BELLAMY, Edward (author); b. Chicopee
Falls, Mass. (1850-1898).
- BELLOWS, George Wesley (painter & lithog-
rapher); b. Columbus, Ohio (1832-1925).
- BENCHLEY, Robert Charles (humorist); b.
Worcester, Mass. (1839-1945).
- BENEŠ, Eduard (Czech statesman); b. Kož-
lany, Bohemia (1884-1948).
- BENÉT, Stephen Vincent (poet & story
writer); b. Bethlehem, Pa. (1898-1943).
- BENÉT, William Rose (poet & novelist); b.
Ft. Hamilton, N. Y. (1886-1950).
- BENJAMIN, Judah Philip (Confederate states-
man); b. St. Thomas, BWI (1811-1884).
- BENNETT, Enoch Arnold (novelist & drama-
tist); b. Hanley, Staffs., Eng. (1867-1931).
- BENNETT, James Gordon (editor); b. Keith,
Banffshire, Scot. (1795-1872).
- BERKSON, Seymour (publisher); b. Chicago,
Ill. (1905-1959).
- BERLIOZ, Louis Hector (composer); b. La
Côte-St.-André, Fr. (1803-1869).
- BERNHARDT, Sarah (Rosine Bernard) (ac-
tress); b. Paris, Fr. (1844-1923).
- BEVIN, Ernest (British statesman); b. Som-
ersetsire, Eng. (1881-1951).
- BIERCE, Ambrose Gwinnett (journalist); b.
Meigs Co., Ohio (1842-1914).
- BISMARCK-SCHÖNHAUSEN, Prince Otto Edu-
ard Leopold von (German statesman); b.
Schönhausen, Prus. (1815-1898).
- BIZET, Georges (Alexandre César Léopold
Bizet) (composer); b. Paris, Fr. (1838-
1875).
- BLACKSTONE, Sir William (jurist); b. Lon-
don, Eng. (1723-1780).
- BLAKE, William (poet & artist); b. London,
Eng. (1757-1827).
- BLUM, Léon (French statesman); b. Paris,
Fr. (1872-1950).
- BOCCACCIO, Giovanni (author); b. Paris, Fr.
(1313-1375).
- BOGART, Humphrey DeForest (actor); b.
New York City (1900-1957).
- BOLÍVAR, Simón (South American liberator);
b. Caracas, Venez. (1783-1830).
- BOND, Carrie (nee Jacobs) (composer of
songs); b. Janesville, Wis. (1862-1946).
- BOONE, Daniel (frontiersman); b. near Read-
ing, Pa. (1734-1820).
- BOOTH, Edwin Thomas (actor); b. Bel Air,
Md. (1833-1893).
- BOOTH, Evangeline Cory (religious leader);
b. London, Eng. (1865-1950).

- BOOTH, John Wilkes** (actor; assassin of Lincoln); b. Hartford County, Md. (1838-1865).
- BOOTH, William** (called General Booth) (religious leader); b. Nottingham, Eng. (1829-1912).
- BORGIA, Cesare** (nobleman & soldier); b. Rome (1475?-1507).
- BORGIA, Lucrezia** (Duchess of Ferrara); b. Rome (1480-1519).
- BOSWELL, James** (diarist & biographer); b. Edinburgh, Scot. (1740-1795).
- BOTTICELLI, Sandro** (Alessandro di Mariano del Filipepi) (painter); b. Florence (1444?-1510).
- BOWIE, James** (soldier); b. Burke Co., Ga. (1799-1836).
- BRAHMS, Johannes** (composer); b. Hamburg, Ger. (1833-1897).
- BRAILLE, Louis** (teacher of blind); b. Coupvray, Fr. (1809-1852).
- BRANDEIS, Louis Dembitz** (jurist); b. Louisville, Ky. (1856-1941).
- BRICE, Fanny** (Fannie Borach) (comedianne); b. New York City (1892-1951).
- BRISBANE, Arthur** (journalist) b. Buffalo, N. Y. (1864-1936).
- BROMFIELD, Louis** (novelist); b. Mansfield, Ohio (1896-1956).
- BRONTË, Charlotte** (novelist); b. Thornton, Yorks., Eng. (1816-1855).
- BRONTË, Emily Jane** (novelist); b. Thornton, Yorks., Eng. (1818-1848).
- BROOKE, Rupert** (poet); b. Rugby, War., Eng. (1887-1915).
- BROWN, Matthew Heywood Campbell** (journalist); b. Brooklyn, N. Y. (1888-1939).
- BROWN, John** (abolitionist); b. Torrington, Conn. (1800-1859).
- BROWNING, Elizabeth Barrett** (poet); b. Coxhoe Hall, Durham, England (1806-1861).
- BROWNING, Robert** (poet); b. London, Eng. (1812-1889).
- BRUEGHEL, Pieter** (painter); b. near Breda, Flanders (1520-1569).
- BRUTUS, Marcus Junius** (Roman politician) (85?-42 B.C.).
- BRYAN, William Jennings** (orator & politician); b. Salem, Ill. (1860-1925).
- BRYANT, William Cullen** (poet & editor); b. Cummington, Mass. (1794-1878).
- BUDDHA.** See Gautama Buddha.
- BUFFALO BILL** (William Frederick Cody) (scout); b. Scott Co., Iowa (1846-1917).
- BUNYAN, John** (preacher & author); b. Elstow, Eng. (1628-1688).
- BURBANK, Luther** (horticulturist); b. Lancaster, Mass. (1849-1926).
- BURKE, Edmund** (statesman); b. Dublin, Ire. (1729-1797).
- BURNS, Robert** (poet); b. Alloway, Scot. (1759-1796).
- BURR, Aaron** (U. S. political leader); b. New-ark, N. J. (1756-1836).
- BUTLER, Nicholas Murray** (educator); b. Elizabeth, N. J. (1862-1947).
- BUTLER, Samuel** (author); b. Langar, Notts., Eng. (1835-1902).
- BYRD, Richard Evelyn** (explorer); b. Winchester, Va. (1888-1957).
- BYRON, George Gordon** (6th Baron Byron) (poet); b. London, Eng. (1788-1824).
- CABELL, James Branch** (novelist); b. Richmond, Va. (1879-1958).
- CABOT, John** (Giovanni Caboto) (navigator); b. Genoa (1450-1498).
- CABOT, Sebastian** (navigator); b. Ven (1476?-1557).
- CAESAR, Gaius Julius** (Roman statesman); b. Rome (100?-44 B.C.).
- CALHERN, Louis** (Carl Henry Vogt) (actor); b. New York City (1895-1956).
- CALHOUN, John Caldwell** (statesman); near Calhoun Mills, S. C. (1782-1850).
- CALVIN, John** (Jean Chauvin) (religious former); b. Noyon, Picardy (1509-1564).
- CARDOZO, Benjamin Nathan** (jurist); New York City (1870-1938).
- CARLYLE, Thomas** (essayist & historian) Ecclefechan, Dumfriesshire, Scot. (1795-1881).
- CARNEGIE, Andrew** (industrialist); b. Dufermline, Scot. (1835-1919).
- CARROLL, Lewis** (Charles Lutwidge Dodgson) (author & mathematician); b. Daresbury, Ches., Eng. (1832-1898).
- CARSON, Kit** (Christopher) (scout); b. Madison Co., Ky. (1809-1868).
- CARUSO, Enrico** (Errico) (tenor); b. Naples, It. (1873-1921).
- CARVER, George Washington** (botanist); Missouri (1864-1943).
- CARY, Arthur Joyce Lunel** (novelist); Londonderry, Ire. (1888-1957).
- CASANOVA DE SEINGALT, Giovanni Jacopo** (adventurer); b. Venice (1725-1798).
- CATHER, Willa Sibert** (novelist); b. Winchester, Va. (1876-1947).
- CATO, Marcus Porcius** (called Cato the Elder) (statesman); b. Tusculum (234-149 B.C.).
- CATT, Carrie Chapman** (nee Lane) (women's suffragist); b. Ripon, Wis. (1859-1947).
- CELLINI, Benvenuto** (goldsmith & sculptor); b. Florence (1500-1571).
- CERVANTES SAAVEDRA, Miguel de** (novelist); b. Alcalá de Henares, Sp. (1547-1616).
- CÉZANNE, Paul** (painter); b. Aix-en-Provence, Fr. (1839-1906).
- CHALIAPIN, Feodor Ivanovitch** (basso); Kazan, Rus. (1873-1938).
- CHAMPLAIN, Samuel de** (explorer); b. Rochefort, Fr. (1567?-1635).
- CHANEY, Lon** (actor); b. Colorado Springs, Colo. (1883-1930).
- CHARLEMAGNE** (Holy Roman Emperor) (birthplace unknown (742-814).
- CHAUCER, Geoffrey** (poet); b. London, Eng. (1340?-1400).
- CHEKHOV, Anton Pavlovich** (dramatist & story writer); b. Taganrog, Rus. (1860-1904).
- CHESTERTON, Gilbert Keith** (author); Kensington, Eng. (1874-1936).
- CHIPPENDALE, Thomas** (cabinetmaker); Otley, Eng. (1718?-1779).
- CHOPIN, Frédéric François** (composer); nr. Warsaw, Pol. (1810-1849).
- CICERO, Marcus Tullius** (orator & statesman); b. Arpinum, It. 106-43 B.C.).
- CLARK, William** (explorer); b. Caroline, Va. (1770-1838).
- CLAY, Henry** (statesman); b. Hanover, Va. (1777-1852).

CEAU, Georges (statesman); b. Moulins-en-Pareds, Vendée, France (1841-1900).

NS, S. L. See Twain

ATRA (Queen of Egypt); b. Alexandria, (69-30 B.C.).

Irvin Shrewsbury (humorist); b. Cah, Ky. (1876-1944).

W. F. See Buffalo Bill.

George Michael (actor & dramatist); b. Providence, R. I. (1878-1942).

Morris Raphael (philosopher & educator); b. Minsk, Rus. (1880-1947).

DGE, Samuel Taylor (poet); b. Ottery St. Mary, Dev., Eng. (1772-1834).

TE (Sidonie-Gabrielle Colette) (novelist); b. St.-Sauveur, Fr. (c.1873-1954).

W. Ronald (actor); b. Richmond, Surrey, Eng. (1891-1958).

BUS, Christopher (Cristoforo Colombo) (discoverer of America); b. Genoa (1492-1506).

ON, Karl Taylor (physicist); b. Woosung, China (1887-1954).

US (K'ung Fu-tz'ü) (philosopher); b. Mantung prov., China (c. 551-479 B.C.).

EVE, William (dramatist); b. nr. London, Eng. (1670-1729).

Joseph (Teodor Józef Konrad Korwinski) (novelist); b. Berdichev, Ukraine (1857-1924).

James Fenimore (novelist); b. Longton, N. J. (1789-1851).

Peter (Industrialist & philanthropist); b. New York City (1791-1883).

ICUS, Nicolaus (Mikolaj Kopernik) (astronomer); b. Thorn, Pol. (1473-1543).

T, James John (boxer); b. San Francisco, Calif. (1866-1933).

LE, Pierre (dramatist); b. Rouen, France (1606-1684).

Jean Baptiste Camille (painter); b. Paris, Fr. (1796-1875).

GIO, Antonio Allegri da (painter); b. Cremona, It. (1494-1534).

(or CORTEZ), Hernando (explorer); b. Medellin, Sp. (1485-1547).

Jane (Jane Cowles) (actress); b. Boston, Mass. (1884-1950).

William (poet); b. Great Berkhamstead, Herts., Eng. (1731-1800).

James Middleton (publisher); b. Jackman, Ohio (1870-1957).

Stephen (novelist & poet); b. New York, N. J. (1871-1900).

Benedetto (philosopher); b. Pescasseroli, It. (1866-1952).

TT, Davy (David) (frontiersman); b. Greene Co., Tenn. (1786-1836).

Marie (Marja Skłodowska) (physicist); b. Warsaw, Pol. (1867-1934).

Pierre (chemist); b. Paris, Fr. (1859-1944).

George Armstrong (army officer); b. Rumley, Ohio (1839-1876).

CH, Walter Johannes (orchestra conductor); b. Breslau, Ger. (1862-1950).

Charles Anderson (editor); b. Hinsdale, Ill. (1819-1897).

D'ANNUNZIO, Gabriele (soldier & author); b. Francaville al Mare, Pescara, It. (1863-1938).

DANTE (or DURANTE) ALIGHIERI (poet); b. Florence (1265-1321).

DANTON, Georges Jacques (French Revolutionary leader); b. Arcis-sur-Aube, Fr. (1759-1794).

DARROW, Clarence Seward (lawyer); b. Kinsman, Ohio (1857-1938).

DARWIN, Charles Robert (naturalist); b. Shrewsbury, Shrops., Eng. (1809-1882).

DAUMIER, Honoré (caricaturist); b. Marseille, Fr. (1808-1879).

DAVID (King of Israel & Judah) (died c.973 B.C.).

DAVIDSON, Jo (sculptor); b. New York City (1883-1952).

DAVIS, Elmer Holmes (radio commentator); b. Aurora, Ind. (1890-1958).

DAVIS, Jefferson (Pres. of Confederacy); b. Christian (now Todd) Co., Ky. (1808-1889).

DEAN, James (actor); b. Marion, Ind. (1931-1955).

DEBS, Eugene Victor (Socialist leader); b. Terre Haute, Ind. (1855-1926).

DEBUSSY, Claude Achille (composer); b. St. Germain-en-Laye, Fr. (1862-1918).

DEFOE, Daniel (novelist); b. London, Eng. (1659?-1731).

DEGAS, Hilaire Germain Edgar (painter); b. Paris, Fr. (1834-1917).

DE MILLE, Cecil Blount (movie director); b. Ashfield, Mass. (1881-1959).

DEMOSTHENES (orator); b. Athens (385?-322 B.C.).

DESCARTES, René (philosopher & mathematician); b. La Haye, Fr. (1596-1650).

DE SOTO, Hernando (explorer); b. Barcarota, Sp. (1500?-1542).

DE VOTO, Bernard Augustine (author); b. Ogden, Utah (1897-1955).

DEWEY, George (naval officer); b. Montpelier, Vt. (1837-1917).

DEWEY, John (philosopher & educator); b. Burlington, Vt. (1859-1952).

DICKENS, Charles John Huffam (novelist); b. Portsea, Eng. (1812-1870).

DICKINSON, Emily Elizabeth (poet); b. Amherst, Mass. (1830-1886).

DIAGENES (philosopher); b. Sinope, Asia Minor (412?-323 B.C.).

DIOR, Christian (fashion designer); b. Granville, Normandy, Fr. (1905-1957).

DISRAELI, Benjamin (statesman); b. London, Eng. (1804-1881).

DODGSON, C. L. See Carroll, Lewis.

DONAT, Robert (actor); b. Withington, Eng. (1905-1958).

DONNE, John (poet); b. London, Eng. (1573-1631).

DORSEY, Jimmy (James Francis Dorsey) (band leader); b. Shenandoah, Pa. (1904-1957).

DORSEY, Tommy (Thomas Francis Dorsey, Jr.) (band leader); b. Mahanoy Plane, Pa. (1905-1956).

DOSTOEVSKI, Fyodor Mikhailovich (novelist); b. Moscow, Rus. (1821-1881).

DOUGLAS, Stephen Arnold (politician); b. Brandon, Vt. (1813-1861).

- DOYLE**, Sir Arthur Conan (novelist & spiritualist); b. Edinburgh, Scot. (1859-1930).
- DRAKE**, Sir Francis (navigator); b. Tavistock, Devons., Eng. (1545?-1596).
- DRAPER**, Ruth (actress); b. New York City (1884-1956).
- DREISER**, Theodore (novelist); b. Terre Haute, Ind. (1871-1945).
- DRESSLER**, Marie (Lella Koerber) (actress); b. Cobourg, Ont., Can. (1869-1934).
- DREYFUS**, Alfred (French army officer); b. Alsace (1859-1935).
- DRYDEN**, John (poet); b. Northamptonshire, Eng. (1631-1700).
- DULLES**, John Foster (U. S. statesman); b. Washington, D. C. (1888-1959).
- DUMAS**, Alexandre (called Dumas père) (novelist); b. Villers-Cotterets, Fr. (1802-1870).
- DUMAS**, Alexandre (called Dumas fils) (novelist); b. Paris, Fr. (1824-1895).
- DU MAURIER**, George Louis Palmella Busson (novelist); b. Paris, Fr. (1834-1896).
- DUNCAN**, Isadora (dancer); b. San Francisco, Calif. (1878-1927).
- DUSE**, Eleonora (actress); b. Chioggia, It. (1859-1924).
- DVOŘÁK**, Antonín (composer); b. Mühlhausen, Bohemia (1841-1904).
- EARHART**, Amelia (aviator); b. Atchison, Kans. (1898-1937).
- EDDY**, Mary Morse (nee Baker) (religious leader); b. Bow, N. H. (1821-1910).
- EDISON**, Thomas Alva (inventor); b. Milan, Ohio (1847-1931).
- EDMAN**, Irwin (philosopher); b. New York City (1896-1954).
- EHRlich**, Paul (bacteriologist); Silesia prov., Prus. (1854-1915).
- EINSTEIN**, Albert (physicist); b. Ulm, Ger. (1879-1955).
- ELGAR**, Sir Edward (composer); b. Worcester, Eng. (1857-1934).
- ELIOT**, George (Mary Ann Evans) (novelist); b. Warickshire, Eng. (1819-1880).
- EMERSON**, Ralph Waldo (philosopher & poet); b. Boston, Mass. (1803-1882).
- ENESCO**, Georges (composer); b. Dorohoi, Rumania (1881-1955).
- ENGELS**, Friedrich (Socialist writer); b. Barmen, Ger. (1820-1895).
- EPICURUS** (philosopher); b. Samos (341-270 B.C.).
- EPSTEIN**, Sir Jacob (sculptor); b. New York City (1880-1959).
- ERASMUS**, Desiderius (Gerhard Gerhards) (scholar); b. Rotterdam (1466?-1536).
- ERICSON**, Leif (navigator) (c.10th cent. A.D.).
- EUCLID** (mathematician) (c.300 B.C.).
- EURIPIDES** (dramatist); b. Salamis (c. 484-407 B.C.).
- FAIRBANKS**, Douglas (actor); b. Denver, Colo. (1883-1939).
- FALLA**, Manuel de (composer); b. Cadiz, Sp. (1876-1946).
- FARADAY**, Michael (physicist); b. Newington, Sur., Eng. (1791-1867).
- FERMI**, Enrico (physicist); b. Rome, It. (1901-1954).
- FIELD**, Eugene (poet); b. St. Louis, Mo. (1850-1895).
- FIELD**, Marshall, III (publisher & philanthropist); b. Chicago, Ill. (1893-1956).
- FIELDING**, Henry (novelist); b. nr. Glastonbury, Som., Eng. (1707-1754).
- FIELDS**, W. C. (Claude William Dukenfield) (actor); b. Philadelphia, Pa. (1880-1937).
- FISKE**, Minnie Maddern (nee Davey) (actress); b. New Orleans, La. (1865-1932).
- FITZGERALD**, Francis Scott Key (novelist); b. St. Paul, Minn. (1896-1940).
- FITZSIMMONS**, Robert Prometheus (boxer); b. Cornwall, Eng. (1862-1917).
- FLAUBERT**, Gustave (novelist); b. Rouen, Fr. (1821-1880).
- FLEMING**, Sir Alexander (bacteriologist); b. Lochfield, Scot. (1881-1955).
- FORD**, Henry (industrialist); b. Greenfield, Mich. (1863-1947).
- FOSTER**, Stephen Collins (composer); b. Pittsburgh, Pa. (1826-1864).
- FRANCE**, Anatole (Jacques Anatole France Thibault) (author); b. Paris (1844-1924).
- FRANKLIN**, Benjamin (statesman & scientist); b. Boston, Mass. (1706-1790).
- FRAZER**, Sir James George (anthropologist); b. Glasgow, Scot. (1854-1941).
- FREUD**, Sigmund (psychoanalyst); b. Freiberg, Moravia (1856-1939).
- FULTON**, Robert (inventor); b. Lancaster, Pa. (1765-1815).
- GAINSBOROUGH**, Thomas (painter); b. Salisbury, Suff., Eng. (1727-1788).
- GALILEI**, Galileo (astronomer & physicist); b. Pisa, It. (1564-1642).
- GALSWORTHY**, John (novelist & dramatist); b. Coombe, Sur., Eng. (1867-1933).
- GANDHI**, Mohandas Karamchand (called Mahatma Gandhi) (Hindu leader); b. Porbandar, India (1869-1948).
- GARIBALDI**, Giuseppe (Italian national leader); b. Nice, Fr. (1807-1882).
- GARRICK**, David (actor); b. Hereford, Hereford, Eng. (1717-1779).
- GARRISON**, William Lloyd (abolitionist); b. Newburyport, Mass. (1805-1879).
- GAUGUIN**, Eugène Henri Paul (painter); b. Paris, Fr. (1848-1903).
- GAUTAMA BUDDHA** (Prince Siddhartha) (philosopher); b. Kapilavastu, India (563-483 B.C.).
- GEDDES**, Norman Bel (stage designer); b. Adrian, Mich. (1893-1958).
- GEHRIG**, Lou (Henry Louis Gehrig) (baseball player); b. New York City (1903-1953).
- GENGHIS KHAN** (Temujin) (conqueror); b. nr. Lake Baikal in Asia (1162-1227).
- GEORGE**, Henry (economist); b. Philadelphia, Pa. (1839-1897).
- GERONIMO** (Goyathlay) (Apache chieftain); b. Arizona (1829-1909).
- GERSHWIN**, George (composer); b. Brookline, N. Y. (1898-1937).
- GIBBON**, Edward (historian); b. Putney, Eng. (1737-1794).
- GIBSON**, Charles Dana (illustrator); b. Boston, Mass. (1867-1944).
- GIDE**, André (author); b. Paris, Fr. (1871-1951).

T, Sir William Schwenck (dramatist
rettist); b. London, England (1836-

di Bondone (painter); b. Vespig-
It. (1276?-1337).

ONE, William Ewart (statesman); b.
pool, Eng. (1809-1898).

N, James (actor); b. New York City
1959).

Christoph Willibald (composer); b.
ach, Bavaria (1714-1787).

LS, Joseph Paul (Nazi leader); b.
t, Ger. (1897-1945).

G, Hermann (Nazi leader); b. Rosen-
Bavaria (1893-1946).

LS, George Washington (engineer);
oklyn, N. Y. (1858-1928).

, Johann Wolfgang von (poet); b.
furt am Main, Ger. (1749-1832).

Vincent van (painter); b. Groot-
rt, Brabant, Hol. (1853-1890).

Nikolai Vasilievich (novelist); b. nr.
od, Poltava, Ukr. (1809-1852).

ITH, Oliver (dramatist & poet); b.
y Longford, Ire. (1728-1774).

S, Samuel (labor leader); b. London,
1850-1924).

AR, Charles (inventor); b. New
Conn. (1800-1860).

Maxim (Alexei Maximovich Peshkov)
or); b. Nizhni Novgorod, Rus. (1868-

Jay (Jason) (financier); b. Roxbury,
(1836-1892).

, Charles François (composer); b.
Fr. (1818-1893).

LUCIENTES, Francisco José de
er); b. Fuendetodos, Sp. (1746-1828).

Thomas (poet); b. London, Eng.
1771).

El (Domenicos Theotocopoulos)
er); b. Candia, Crete (c.1542-1614).

V, Horace (journalist & politician);
erst, N. H. (1811-1872).

Edvard Hagerup (composer); b. Ber-
or. (1843-1907).

J, David Lewelyn Wark (movie pro-
); b. La Grange, Ky. (1875-1948).

Jacob (mythologist); b. Hanau, Ger.
1863).

Willhelm (mythologist); b. Hanau,
1786-1859).

Sacha (Alexandre) (actor & movie
r); b. St. Petersburg, Rus. (1885-

ERG, Johann (printer); b. Mainz,
1400?-1468).

athan (American Revolutionary offi-
Coventry, Conn. (1755-1776).

rans (painter); b. Antwerp, Hol.
1666).

N, Alexander (statesman); b. Lee-
(1757?-1804).

, John (statesman); b. Braintree,
1737-1793).

George Frederick (Georg Friedrich
) (composer); b. Halle, Ger. (1685-

William Christopher (blues com-
b. Florence, Ala. (1873-1958).

HANNIBAL (Carthaginian general) (247-183
B.C.).

HARDY, Thomas (novelist); b. Dorsetshire,
Eng. (1840-1928).

HARLOW, Jean (Harlean Carpenter) (ac-
tress); b. Kansas City, Mo. (1911-1937).

HARTE, Bret (Francis Brett Harte) (author);
b. Albany, N. Y. (1836-1902).

HARVEY, William (physician); b. Folkestone,
Kent, Eng. (1578-1657).

HAWTHORNE, Nathaniel (novelist); b. Salem,
Mass. (1804-1864).

HAY, John Milton (statesman); b. Salem,
Ind. (1838-1905).

HAYDN, Franz Joseph (composer); b. Rohrau,
Aus. (1732-1809).

HEARST, William Randolph (publisher); b.
San Francisco, Calif. (1863-1951).

HEGEL, Georg Wilhelm Friedrich (philoso-
pher); b. Stuttgart, Ger. (1770-1831).

HEINE, Heinrich (Harry) (poet); b. Düs-
seldorf, Ger. (1797-1856).

HENRY, O. (William Sydney Porter) (story
writer); b. Greensboro, N. C. (1862-1910).

HENRY, Patrick (statesman); b. Hanover Co.,
Va. (1736-1799).

HEPPLEWHITE, George (furniture designer)
b. England (?-1786).

HERBERT, Victor (composer); b. Dublin, Ire.
(1859-1924).

HEROD (Herdoes) (called Herod the Great)
(King of Judea) (73?-4 B.C.).

HERODOTUS (historian); b. Halicarnassus,
Asia Minor (c.484-425 B.C.).

HERRIOT, Édouard (French statesman); b.
Troyes, Fr. (1872-1957).

HERSHOLT, Jean (actor); b. Copenhagen,
Den. (1886-1956).

HINDENBURG, Paul von (Paul Ludwig Hans
Anton von Beneckendorff und von Hinden-
burg) (statesman); b. Posen, Prus. (1847-
1934).

HINES, Duncan (author); b. Bowling Green,
Ky. (1880-1959).

HIPPOCRATES (physician); b. Kos, Dodeca-
nese (460?-377 B.C.).

HITLER, Adolf (German dictator); b. Bra-
nau, Aus. (1889-1945).

HOFMANN, Josef Casimir (pianist); b. Kra-
cow, Pol. (1876-1957).

HOGARTH, William (painter & engraver); b.
London, Eng. (1697-1764).

HOLBEIN, Hans (the Elder) (painter); b.
Augsburg, Bavaria (1465?-1524).

HOLBEIN, Hans (the Younger) (painter); b.
Augsburg, Bavaria (1497?-1543).

HOLMES, Oliver Wendell (author); b. Cam-
bridge, Mass. (1809-1894).

HOLMES, Oliver Wendell (jurist); b. Boston,
Mass. (1841-1935).

HOMER (Greek poet) (c.850 B.C.).

HOMER, Winslow (painter); b. Boston, Mass.
(1836-1910).

HONEGGER, Arthur (composer); b. Le Havre,
Fr. (1892-1955).

HOPPE, Willie (William Frederick Hoppe)
(billiards player); b. Cornwall, N. Y.
(1887-1959).

HORACE (Quintus Horatius Flaccus) (poet);
b. Venosa, Lucania (65-8 B.C.).

HOUDINI, Harry (Ehrich Weiss) (magician);
b. Appleton, Wis. (1874-1926).

- HOUSMAN**, Alfred Edward (poet); b. Fockburg, Worcs., Eng. (1859-1936).
- HOUSTON**, Samuel (political leader); b. Rockbridge Co., Va. (1793-1863).
- HOWARD**, Leslie (actor); b. London, Eng. (1893-1943).
- HOWE**, Elias (inventor); b. Spencer, Mass. (1819-1867).
- HOWELLS**, William Dean (author); b. Martin's Ferry, Ohio (1837-1920).
- HUDSON**, Henry (English navigator) (?-1611).
- HUGHES**, Charles Evans (jurist); b. Glens Falls, N. Y. (1862-1948).
- HUGO**, Victor Marie (author); b. Besançon, Fr. (1802-1885).
- HULL**, Josephine (nee Josephine Sherwood) (actress); b. Newtonville, Mass. (1886-1957).
- HUME**, David (philosopher); b. Edinburgh, Scot. (1711-1776).
- HUSTON**, Walter (Walter Houghston) (actor); b. Toronto, Ont., Can. (1884-1950).
- HUXLEY**, Thomas Henry (biologist); b. Ealing, Eng. (1825-1895).
- IBSEN**, Henrik (dramatist); b. Skien, Nor. (1828-1906).
- INNESS**, George (painter); b. nr. Newburgh, N. Y. (1825-1894).
- IRVING**, Washington (author); b. New York City (1783-1859).
- JACKSON**, Thomas Jonathan (general); b. Clarksburg, Va. (now W. Va.) (1824-1863).
- JAMES**, Henry (novelist); b. New York City (1843-1916).
- JAMES**, Jesse Woodson (outlaw); b. Clay Co., Mo. (1847-1882).
- JAMES**, William (psychologist); b. New York City (1842-1910).
- JANIS**, Elsie (Elsie Bierbower) (actress); b. Columbus, Ohio (1889-1956).
- JAY**, John (statesman & jurist); b. New York City (1745-1829).
- JEFFRIES**, James J. (boxer); b. Carroll, Ohio (1875-1953).
- JENNER**, Edward (physician); Berkeley, Glos., Eng. (1749-1823).
- JOAN OF ARC** (Jeanne d'Arc) (saint & patriot); b. Domremy-la-Pucelle, Fr. (1412-1431).
- JOHNSON**, Jack (John Arthur Johnson) (boxer); b. Galveston, Tex. (1876-1946).
- JOHNSON**, Samuel (lexicographer & author); b. Lichfield, Staffs., Eng. (1709-1784).
- JOLIOT-CURIE**, Frédéric (physicist); b. Paris, Fr. (1900-1958).
- JOLIOT-CURIE**, Irène (Irène Curie) (physicist); b. France (1897-1956).
- JOLLIET** (or **JOLIET**), Louis (explorer); b. Beauré, Can. (1645-1700).
- JOLSON**, Al (Asa Yoelson) (actor & singer); b. St. Petersburg, Rus. (1886-1950).
- JONES**, John Paul (John Paul) (naval officer); b. Scotland (1747-1792).
- JONSON**, Ben (Benjamin) (poet & dramatist); b. Westminster, Eng. (1572-1637).
- JOYCE**, James (novelist); b. Dublin, Ire. (1882-1941).
- JOYCE**, Peggy Hopkins (nee Margaret Upton) (actress); b. Norfolk, Va. (1893?-1957).
- JUÁREZ**, Benito Pablo (statesman); b. Guadalupe, Oaxaca, Mex. (1806-1872).
- KANT**, Immanuel (philosopher); b. Königsberg, Prus. (1724-1804).
- KEATS**, John (poet); b. London, Eng. (1795-1821).
- KEMAL ATATÜRK** (Mustafa Kemal) (statesman); b. Salonika, Turk. (1881-1938).
- KEPLER**, Johannes (astronomer); b. Württemberg, Ger. (1571-1630).
- KERN**, Jerome David (composer); b. New York City (1885-1945).
- KETTERING**, Charles Franklin (engineer); b. Loudonville, Ohio (1878-1958).
- KEY**, Francis Scott (lawyer); b. Frederick, Md. (1779-1843).
- KEYNES**, John Maynard (economist); b. Cambridge, Eng. (1883-1946).
- KIDD**, William (called Capt. Kidd) (pirate); b. Greenock, Scot. (1645?-1701).
- KILMER**, Alfred Joyce (poet); b. New Brunswick, N. J. (1886-1918).
- KIPLING**, Rudyard (author); b. Bombo, India (1865-1936).
- KNOX**, John (religious reformer); b. Dingwall, E. Lothian, Scot. (1505-1572).
- KOSCIUSKO**, Thaddeus (Tadeusz Andrzej Bonawentura Kosciuszko) (military leader); b. province of Lithuania, Poland (1746-1817).
- KOUSSEVITZKY**, Serge (Sergel) Alexandrovich (orchestra conductor); b. Russia (1874-1951).
- KUBLAI KHAN** (Mongol conqueror) (1215-1294).
- LAFAYETTE**, Marquis de (Marie Joseph Yvon Roch Gilbert du Motier) (military officer); b. Auvergne, Fr. (1757-1834).
- LA FOLLETTE**, Robert Marin (politician); b. Primrose, Wis. (1855-1925).
- LA GUARDIA**, Fiorello Henry (politician); b. New York City (1882-1947).
- LAMARCK**, Chevalier de (Jean Baptiste Pierre Antoine de Monet) (naturalist); b. Bazantin, Picardy (1744-1829).
- LAMB**, Charles (essayist); b. London, Eng. (1775-1834).
- LANDIS**, Kenesaw Mountain (jurist); b. Millville, Ohio (1866-1944).
- LANGTRY**, Lily (nee Emily Le Breton) (actress); b. island of Jersey (1852-1929).
- LAO-TZU** (or **LAO-TSE**) (Li Erh) (philosopher); b. Honan prov., China (c.604 B.C.).
- LARDNER**, Ring (Ringgold Wilmer Lard) (story writer); b. Niles, Mich. (1885-1958).
- LA SALLE**, Sieur de (Robert Cavellier) (explorer); b. Rouen, Fr. (1643-1687).
- LAUDER**, Sir Harry (Harry MacLennan) (singer); b. Portobello, Scot. (1870-1958).
- LAVOISIER**, Antoine Laurent (chemist); b. Paris, Fr. (1743-1794).
- LAWRENCE**, David Herbert (novelist); b. Nottingham, Eng. (1885-1930).
- LAWRENCE**, Gertrude (Gertrud Klaven) (actress); b. London, Eng. (1900-1952).
- LAWRENCE OF ARABIA** (Thomas Edward Lawrence; later changed name to T. E. Lawrence) (author & soldier); b. Portmadoc, W. Wales (1888-1935).
- LEAR**, Edward (nonsense poet); b. London, Eng. (1812-1888).

- bert Edward (Confederate general);
tford Estate, Va. (1807-1870).
- Franz (composer); b. Komárom,
(1870-1948).
- Nikolai (Vladimir Ilch Ulyanov)
sman); b. Simbirsk, Rus. (1870-1924).
- D., Benny (Benjamin Leiner)
); b. New York City (1896-1947).
- Meriwether (explorer); b. Albemarle
a. (1774-1809).
- Sinclair (novelist); b. Sauk Centre,
(1885-1951).
- enny (Johanna Maria Lind) (so-
); b. Stockholm, Swed. (1820-1887).
- Joseph (surgeon); b. Upton, Essex,
1827-1912).
- ranz (composer & pianist); b. Rald-
ung. (1811-1886).
- STONE, David (missionary & ex-
); b. Lanarkshire, Scot. (1813-1873).
- GEORGE, David (statesman); b. Man-
c, Eng. (1863-1945).
- John (philosopher); b. Somerset-
Eng. (1632-1704).
- Henry Cabot (legislator); b. Boston,
(1850-1924).
- D., Carole (Carol Jane Peters) (ac-
b. Ft. Wayne, Ind. (1908-1942).
- SO, Cesare (criminologist); b. Ver-
c. (1836-1909).
- Jack (John Griffith London) (nov-
b. San Francisco, Calif. (1876-
1933-1935).
- LOW, Henry Wadsworth (poet); b.
d, Maine (1807-1882).
- Amy (poet); b. Brookline, Mass.
925).
- James Russell (poet); b. Cam-
Mass. (1819-1891).
- St. Ignatius of (Íñigo de Oñez y
(founder of Jesuits); b. Gúí-
prov., Sp. (1491-1556).
- H., Ernst (movie director); b. Ber-
r. (1892-1947).
- ORFF, Erich Friedrich Wilhelm (gen-
b. Kruszevnia, Ger. (1865-1937).
- Martin (religious reformer); b.
n, Ger. (1483-1546).
- UR, Charles (dramatist); b. Scrán-
a. (1895-1956).
- AY, Thomas Babington (author); b.
ershire, Eng. (1800-1859).
- LD, James Ramsay (statesman); b.
outh, Scot. (1866-1937).
- LL, Edward Alexander (composer);
York City (1861-1908).
- DEN, Bernarr (physical culturist);
Mill Spring, Mo. (1868-1955).
- ELLI, Niccolò (political philoso-
b. Florence (1469-1527).
- onnie (Cornelius Alexander McGil-
(baseball executive); b. East
eld, Mass. (1862-1956).
- INCK, Count Maurice (author); b.
Belg. (1862-1949).
- N, Ferdinand (Fernando de Magal-
(navigator); b. Sabrosa, Port.
1521).
- MAGSAYSAY, Ramón (statesman); b. Iba,
Luzon, Philippines (1907-1957).
- MAHAN, Alfred Thayer (naval historian); b.
West Point, N. Y. (1840-1914).
- MAHLER, Gustav (composer & conductor);
b. Kalischt, Bohemia (1860-1911).
- MANET, Edouard (painter); b. Paris, Fr.
(1832-1883).
- MANN, Horace (educator); b. Franklin,
Mass. (1796-1859).
- MANN, Thomas (novelist); b. Lübeck, Ger.
(1875-1955).
- MANSFIELD, Katherine (story writer); b.
Wellington, N. Z. (1888-1923).
- MARAT, Jean Paul (French revolutionist);
b. Boudry, Neuchâtel, Switzerland (1743-
1793).
- MARCONI, Guglielmo (inventor); b. Bologna,
It. (1874-1937).
- MARCUS AURELIUS (Marcus Annius Verus)
(Roman emperor); b. Rome (121-180).
- MARIE ANTOINETTE (Josèphe Jeanne Marie
Antoinette) (Queen of France); b. Vienna,
Aus. (1755-1793).
- MARKHAM, Charles Edwin (poet); b. Ore-
gon City, Oreg. (1852-1940).
- MARLOWE, Christopher (dramatist); b. Can-
terbury, Eng. (1564-1593).
- MARLOWE, Julia (Sarah Frances Frost) (ac-
tress); b. Cumberlandshire, Eng. (1866-
1950).
- MARQUETTE, Jacques (missionary & ex-
plorer); b. Laon, Fr. (1637-1675).
- MARSHALL, John (jurist), b. nr. German-
town, Va. (1755-1835).
- MARX, Karl (Socialist writer); b. Treves,
Prus. (1818-1883).
- MARY STUART (Queen of Scotland); b.
Linthgow, Scot. (1542-1587).
- MASARYK, Thomas Garrigue (statesman); b.
Hodonin, Moravia (1850-1937).
- MASSENET, Jules Émile Frédéric (composer);
b. Montaud, Fr. (1842-1912).
- MASTERS, Edgar Lee (poet); b. Garnett,
Kans. (1869-1950).
- MATISSE, Henri (painter); b. Cateau, Fr.
(1869-1954).
- MAUPASSANT, Henri René Albert Guy de
(story writer); b. Normandy, Fr. (1850-
1893).
- MAXIMILIAN (Ferdinand Maximilian Jo-
seph) (Emperor of Mexico); b. Vienna,
Aus. (1832-1867).
- MAXWELL, James Clerk (physicist); b.
Edinburgh, Scot. (1831-1879).
- McCARTHY, Joseph Raymond (U. S. Sena-
tor); b. Grand Chute, Wis. (1908-1957).
- McCORMACK, John (tenor); b. Athlone, Ire.
(1884-1945).
- McCORMICK, Cyrus Hall (inventor); b.
Rockbridge Co., Va. (1809-1884).
- McGRAW, John Joseph (baseball manager);
b. Truxton, N. Y. (1873-1934).
- MEDICI, Lorenzo de' (called Lorenzo the
Magnificent) (Florentine ruler); b. Flor-
ence (1449-1492).
- MELBA, Nellie (Helen Porter Mitchell) (so-
prano); b. nr. Melbourne, Australia
(1861-1931).
- MELLON, Andrew William (financier); b.
Pittsburgh, Pa. (1855-1937).

- MELVILLE, Herman (novelist); b. New York City (1819-1891).
- MENCKEN, Henry Louis (author); b. Baltimore, Md. (1880-1956).
- MENDEL, Gregor Johann (botanist); b. Heinzendorf, Silesia (1822-1884).
- MENDELEYEV, Dmitri Ivanovich (chemist); b. Tobolsk, Siberia (1834-1907).
- MENDELSSOHN-BARTHOLDY, Jakob Ludwig Felix (composer); b. Hamburg, Ger. (1809-1847).
- MESMER, Franz Anton (physician); b. Itzmann, nr. Constance, Baden (1733-1815).
- METTERNICH, Prince Klemens Wenzel Nepomuk Lothar von (statesman); b. Coblenz, Aus. (1773-1859).
- MICHELANGELO BUONARROTI (painter & sculptor); b. Caprese, Tuscany, It. (1475-1564).
- MILL, John Stuart (philosopher); b. London, Eng. (1806-1873).
- MILLAY, Edna St. Vincent (poet); b. Rockland, Maine (1892-1950).
- MILLER, Glenn (band leader); b. Clarinda, Iowa (1909?-1944).
- MILNE, Alan Alexander (author); b. London, Eng. (1882-1956).
- MILTON, John (poet); b. London, Eng. (1608-1674).
- MINUIT, Peter (Governor of New Amsterdam); b. Wesel, Rhenish Prussia (1580-1638).
- MITCHELL, Margaret (novelist); b. Atlanta, Ga. (1900-1949).
- MOHAMMED (prophet); b. Mecca, Arabia (570-632).
- MOLIÈRE (Jean Baptiste Poquelin) (dramatist); b. Paris, Fr. (1622-1673).
- MOLNÁR, Ferenc (dramatist); b. Budapest, Hung. (1878-1952).
- MONET, Claude (painter); b. Paris, Fr. (1840-1926).
- MONTAIGNE, Michel Eyquem de (essayist); b. nr. Bordeaux, Fr. (1533-1592).
- MONTEZUMA II (Aztec emperor); b. Mexico (1480?-1520).
- MOORE, Thomas (poet); b. Dublin, Ire. (1779-1852).
- MORE, Sir Thomas (statesman & author); b. London, Eng. (1478-1535).
- MORGAN, Helen (singer); b. Danville, Ohio (1900?-1941).
- MORGAN, John Pierpont (financier); b. Hartford, Conn. (1837-1913).
- MORLEY, Christopher Darlington (novelist); b. Haverford, Pa. (1890-1957).
- MORSE, Samuel Finley Breese (painter & inventor); b. Charlestown, Mass. (1791-1872).
- MOUSSORGSKY, Modest Petrovich (composer); b. Karev, Rus. (1839-1881).
- MOZART, Wolfgang Amadeus (Johannes Chrysostomus Wolfgangus Theophilus Mozart) (composer); b. Salzburg, Aus. (1756-1791).
- MURILLO, Bartolomé Esteban (painter); b. Seville, Sp. (1617-1682).
- MUSSOLINI, Benito (Italian dictator); b. Dovia, Forlì, It. (1883-1945).
- NAPOLEON BONAPARTE (Emperor of the French); b. Ajaccio, Corsica (1769-1821).
- NAST, Thomas (cartoonist); b. Landau, (1840-1902).
- NATHAN, George Jean (theater critic); b. Wayne, Ind. (1882-1958).
- NATION, Carry Amelia (temperance leader); b. Garrard Co., Ky. (1846-1911).
- NELSON, Viscount Horatio (naval officer); b. Burnham Thorpe, Norf., Eng. (1758-1805).
- NERO (Nero Claudius Caesar Drusus Germanicus) (Roman emperor); b. Antium, Latium, It. (A.D. 37-68).
- NEWTON, Sir Isaac (mathematician & physicist); b. nr. Grantham, Lincs., (1642-1727).
- NIETZSCHE, Friedrich Wilhelm (philosopher); b. nr. Lützen, Saxony (1844-1900).
- NIGHTINGALE, Florence (nurse); b. Florence, It. (1820-1910).
- NIJINSKY, Waslaw (dancer); b. Warsaw, (1890-1950).
- NOBEL, Alfred Bernhard (industrialist); b. Stockholm, Swed. (1833-1896).
- NOSTRADAMUS (Michel de Notredame) (astrologer); b. St. Remi, Fr. (1503-1566).
- OCHS, Adolph Simon (publisher); b. Cincinnati, Ohio (1858-1935).
- OFFENBACH, Jacques (composer); b. Colmar, Ger. (1819-1880).
- OMAR KHAYYÁM (poet & astronomer); b. Nishapur, Khurasan, Persia (died c. 1131).
- O'NEILL, Eugene Gladstone (dramatist); b. New York City (1888-1953).
- OROZCO, José Clemente (painter); b. Zapatlán, Jalisco, Mex. (1883-1949).
- OSLER, Sir William (physician); b. Bath, head, Ont., Can. (1849-1919).
- OTT, Mel (Melvin Thomas Ott) (baseball player); b. Gretna, La. (1909-1958).
- OVID (Publius Ovidius Naso) (poet); b. Sulmona, It. (43 B.C.-7 A.D. 17).
- PADEREWSKI, Ignace Jan (pianist & statesman); b. Podolia prov., Pol. (1860-1941).
- PAGANINI, Nicolò (violinist); b. Genoa (1782-1840).
- PAINE, Thomas (political philosopher); b. Thetford, Eng. (1737-1809).
- PARNELL, Charles Stewart (Irish nationalist leader); b. Avondale, Wicklow, Ire. (1819-1891).
- PASCAL, Blaise (philosopher); b. Clermont, Fr. (1623-1662).
- PASTEUR, Louis (chemist); b. Dole, Fr. (1822-1895).
- PAVLOV, Ivan Petrovich (physiologist); b. Ryazan dist., Rus. (1849-1936).
- PAVLOVA, Anna (ballerina); b. St. Petersburg, Rus. (1885-1931).
- PEARY, Robert Edwin (explorer); b. Cresskill, N. J. (1856-1920).
- PENN, William (American colonist); b. Wexford, Eng. (1644-1718).
- PEPYS, Samuel (diarist); b. Bampton, (1633-1703).
- PERICLES (statesman); b. Athens (429 B.C.).
- PERÓN, María Eva Duarte de (political leader); b. Los Toldos, Arg. (1919-1955).
- PERSHING, John Joseph (general); b. Littleton, Co., Mo. (1860-1948).

- CH (Francesco Petrarca) (poet); b. Av. It. (1304-1374).
- ELIO (basso); b. Rome, It. (1892-1958).
- ELLO, Luigi (dramatist & novelist); b. Girgenti, Sicily (1867-1936).
- William ("Younger Pitt") (statesman); b. nr. Bromley, Eng. (1759-1806).
- EL (Eugenio Pacelli) (Pope); b. Rome, It. (1858-1958).
- EL, Francisco (explorer); b. Trujillo, P.R. (1470?-1541).
- EL (Aristocles) (philosopher); b. Athens (427?-347 B.C.).
- ELCH (biographer); b. Chaeronea, Gr. (A.D. 46?-120).
- ELNTAS (Matoaka) (American Indian princess); b. Virginia (?) (1595?-1617).
- ELGAR Allan (poet & story writer); b. Worcester, Mass. (1809-1849).
- ELMARCO (traveler); b. Venice (1254?-1321).
- EL (Gnaeus Pompeius Magnus) (general); b. Rome (?) (106-48 B.C.).
- EL DE LEÓN, Juan (explorer); b. Seville, Sp. (1460?-1521).
- EL Alexander (poet); b. London, Eng. (1744).
- EL VILEY (aviator); b. Texas (1900-1935).
- EL TYRONE Edmund (actor); b. Cincinnati, Ohio (1914-1958).
- EL Y, Joseph (chemist); b. nr. Leeds, Eng. (1733-1804).
- EL YEFF, Sergei Sergeevich (composer); b. Petersburg, Rus. (1891-1953).
- EL Y Marcel (novelist); b. Paris, Fr. (1922).
- EL Y (Claudius Ptolemaeus) (astronomer & geographer); b. Ptolemais Hermiou, Egypt (A.D.).
- EL Y, Giacomo (composer); b. Lucca, It. (1824).
- EL Y, Joseph (publisher); b. Makó, Hungary (1847-1911).
- EL Y, Alexander Sergeevich (poet & dramatist); b. Moscow, Rus. (1799-1837).
- EL Y Ernest Taylor (journalist); b. Dana, Iowa (1900-1945).
- EL Y DRAS (mathematician & philosopher); b. Samos (6th century B.C.).
- EL Y, François (satirist); b. nr. Chinon, Fr. (1547-1553).
- EL Y NINOFF, Sergei Wassilievitch (pianist & composer); b. Oneg Estate, Novgorod, Rus. (1873-1943).
- EL Y Jean Baptiste (dramatist); b. La Pléville, Fr. (1639-1699).
- EL Y, Sir Walter (courtier & navigator); b. London, Eng. (1552?-1618).
- EL Y (Raffaello Santi) (painter); b. Urbino, It. (1483-1520).
- EL Y, Grigori Efimovich (monk); b. Krasnoyarsk prov., Siberia (1871?-1916).
- EL Y Maurice Joseph (composer); b. Cluses, Fr. (1875-1937).
- EL Y, Walter (army surgeon); b. Belvoir, Va. (1902).
- EL Y, Max (Max Goldmann) (theater manager); b. nr. Vienna, Aus. (1873-1943).
- EL Y REMBRANDT (Harmensz van Rijn Rembrandt) (painter); b. Leyden, Hol. (1606-1669).
- EL Y RENOIR, Pierre Auguste (painter); b. Limoges, Fr. (1841-1919).
- EL Y RESPIGHI, Ottorino (composer); b. Bologna, It. (1879-1936).
- EL Y REVERE, Paul (silversmith); b. Boston, Mass. (1735-1818).
- EL Y REYNOLDS, Sir Joshua (painter); b. nr. Plymouth, Eng. (1723-1792).
- EL Y RHODES, Cecil John (South African statesman); b. Bishop Stortford, Herts., Eng. (1853-1902).
- EL Y RICE, Grantland (sports writer); b. Murfreesboro, Tenn. (1880-1954).
- EL Y RICHELIEU, Duc de (Armand Jean du Plessis) (cardinal); b. Paris (1585-1642).
- EL Y RILEY, James Whitcomb (poet); b. Greenfield, Ind. (1849-1916).
- EL Y RIMSKY-KORSAKOV, Nikolai Andreevich (composer); b. Tikhvin, Rus. (1844-1908).
- EL Y RINEHART, Mary (nee Roberts) (novelist); b. Pittsburgh, Pa. (?-1958).
- EL Y RIVERA, Diego (painter); b. Guanajuato, Mex. (1886-1957).
- EL Y ROBESPIERRE, Maximilien François Marie Isidore de (French Revolutionist); b. Arras, Fr. (1758-1794).
- EL Y ROBINSON, Bill (Luther) (dancer); b. Richmond, Va. (1878-1949).
- EL Y ROBINSON, Edwin Arlington (poet); b. Head Tide, Maine (1869-1935).
- EL Y ROCKEFELLER, John Davison (capitalist); b. Richford, N. Y. (1839-1937).
- EL Y ROCKNE, Knute Kenneth (football coach); b. Voss, Nor. (1888-1931).
- EL Y RODIN, François Auguste René (sculptor); b. Paris, Fr. (1840-1917).
- EL Y ROENTGEN, Wilhelm Konrad (physicist); b. Lennep, Prus. (1845-1923).
- EL Y ROGERS, Will (William Penn Adair Rogers) (humorist); b. Oologah, Okla. (1879-1935).
- EL Y ROLLAND, Romain (author); b. Clamecy, Fr. (1866-1944).
- EL Y ROMBERG, Sigmund (composer); b. Hungary (1887-1951).
- EL Y ROSSETTI, Dante Gabriel (painter & poet); b. London, Eng. (1828-1882).
- EL Y ROSSINI, Gioacchino Antonio (composer); b. Pesaro, It. (1792-1868).
- EL Y ROSTAND, Edmond (dramatist); b. Marseilles, Fr. (1868-1918).
- EL Y ROUSSEAU, Jean Jacques (philosopher); b. Geneva, Switz. (1712-1778).
- EL Y RUBENS, Peter Paul (painter); b. Siegen, Westphalia (1577-1640).
- EL Y RUNYON, Alfred Damon (journalist); b. Manhattan, Kans. (1884-1946).
- EL Y RUSKIN, John (art critic); b. London, Eng. (1819-1900).
- EL Y RUSSELL, Lillian (Helen Louise Leonard) (soprano); b. Clinton, Iowa (1861-1922).
- EL Y RUTH, Babe (George Herman Ruth) (baseball player); b. Baltimore, Md. (1895-1948).
- EL Y SAINT-GAUDENS, Augustus (sculptor); b. Dublin, Ire. (1848-1907).
- EL Y SAINT-SAËNS, Charles Camille (composer); b. Paris, Fr. (1835-1921).

- SAND, George (Amandine Lucille Aurore Du-devant, nee Dupin) (novelist); b. Paris, Fr. (1804-1876).
- SANTAYANA, George (philosopher); b. Madrid, Sp. (1863-1952).
- SAPPHO (poet); b. Lesbos (lived c.600 B.C.).
- SARGENT, John Singer (painter); b. Florence, It., of American parents (1856-1925).
- SARTO, Andrea del (Andrea Domenico d'Ag-nolo di Francesco) (painter); b. Florence (1486-1531).
- SAUL (King of Israel) (11th century B.C.).
- SCHILLER, Johann Christoph Friedrich von (dramatist & poet); b. Marbach, Wurttem-berg, Ger. (1759-1805).
- SCHÖNBERG, Arnold (composer); Vienna, Aus. (1874-1951).
- SCHOPENHAUER, Arthur (philosopher); b. Danzig (1788-1860).
- SCHUBERT, Franz Peter (composer); b. Vi-enna, Aus. (1797-1826).
- SCHUMANN, Robert Alexander (composer); b. Zwickau, Saxony, Ger. (1810-1856).
- SCHUMANN-HEINK, Ernestine (nee Roessler) (contralto); b. nr. Prague, Boh. (1861-1936).
- SCHURZ, Carl (U. S. army officer & journal-ist); b. nr. Cologne, Ger. (1829-1906).
- SCOTT, Robert Falcon (explorer); b. Deven-port, Eng. (1868-1912).
- SCOTT, Sir Walter (novelist); b. Edinburgh, Scot. (1771-1832).
- SHAKESPEARE, William (dramatist); b. Stratford on Avon, Eng. (1564-1616).
- SHAW, George Bernard (dramatist); b. Dub-lin, Ire. (1856-1950).
- SHELLEY, Percy Bysshe (poet); b. nr. Hor-sham, Sus., Eng. (1792-1822).
- SHERATON, Thomas (furniture designer); Stockton-on-Tees, Eng. (1751-1806).
- SHERIDAN, Richard Brinsley (dramatist); b. Dublin, Ire. (1751-1816).
- SHERMAN, William Tecumseh (army officer); b. Lancaster, Ohio (1820-1891).
- SHERWOOD, Robert Emmet (dramatist); b. New Rochelle, N. Y. (1896-1955).
- SIBELIUS, Jean (Johann Julius Christian Sibelius) (composer); b. Tavastehus, Fin. (1865-1957).
- SKINNER, Otis (actor); b. Cambridge, Mass. (1858-1942).
- SLOAN, John (painter); b. Lock Haven, Pa. (1871-1951).
- SMITH, Adam (economist); b. Kirkcaldy, Fifes., Scot. (1723-1790).
- SMITH, Alfred Emanuel (politician); b. New York City (1873-1944).
- SMITH, John (American colonist); b. Wil-loughby, Lincs., Eng. (1580-1631).
- SMITH, Joseph (religious leader); b. Sharon, Vt. (1805-1844).
- SOCRATES (philosopher); b. Athens (469-399 B.C.).
- SOLOMON (King of Israel); b. Jerusalem (?) (died c.933 B.C.).
- SOLON (lawgiver); b. Salamis, Gr. (638?-759 B.C.).
- SOPHOCLES (dramatist); b. nr. Athens (496?-406 B.C.).
- SOTHERN, Edward Hugh (actor); b. New Orleans, La. (1859-1933).
- SOUSA, John Philip (composer); b. Win-nington, D. C. (1854-1932).
- SPEAKER, Tris (Tristram E. Speaker) (b-ball player); b. Hubbard, Tex. (1888-1938).
- SPENCER, Herbert (philosopher); b. De-Eng. (1820-1903).
- SPENGLER, Oswald (philosopher); b. Ble-enburg, Ger. (1880-1936).
- SPENSER, Edmund (poet); b. London, Eng. (1552?-1599).
- SPINOZA, Baruch (philosopher); b. Am-dam, Hol. (1632-1677).
- STALIN, Joseph. Vissarionovich (Iosif Dzhugashvili) (statesman); b. nr. T-Georgia, Rus. (1879-1953).
- STANISLAVSKI (Konstantin Sergeevich A-sev) (stage producer); b. Moscow, Rus. (1863-1938).
- STANLEY, Sir Henry Morton (John B-lands) (explorer); b. Denbigh, W- (1841-1904).
- STEIN, Gertrude (author); b. Allegheny, Pa. (1874-1946).
- STEINMETZ, Charles Proteus (engineer); Breslau, Ger. (1865-1923).
- STENDHAL (Marie Henri Beyle) (novel-ist); b. Grenoble, Fr. (1783-1842).
- STERNE, Laurence (novelist); b. Clon- (1713-1768).
- STEVENSON, Robert Louis Balfour (nov- & poet); b. Edinburgh, Scot. (1850-1894).
- STOKES, Thomas Lunsford, Jr. (journal-ist); b. Atlanta, Ga. (1898-1958).
- STONE, Lucy (woman suffragist); b. West Brookfield, Mass. (1818-1893).
- STOWE, Harriet Elizabeth (nee Beech-er) (novelist); b. Litchfield, Connecticut (1796-1866).
- STRADIVARI, Antonio (violinmaker); b. Cremona, It. (1644-1737).
- STRAUS, Oskar (composer); b. Vienna, Aus. (1870-1954).
- STRAUSS, Johann (composer); b. Vie- (1825-1899).
- STRAUSS, Richard (composer); b. Mun- (1864-1949).
- STUART, Gilbert Charles (painter); b. RI-Island (1755-1828).
- STUYVESANT, Peter (Governor of New-York; b. W. Friesland, Neth. (1618-1672).
- SULLIVAN, Sir Arthur Seymour (compos-er); b. London, Eng. (1842-1900).
- SULLIVAN, Francis Loftus (actor); b. Lon-don, Eng. (1903-1956).
- SULLIVAN, John Lawrence (boxer); b. Bos-ton, Mass. (1858-1918).
- SUN Yat-Sen (statesman); b. nr. Me- (1866-1925).
- SWIFT, Jonathan (satirist); b. Dublin, Ire. (1667-1745).
- SWINBURNE, Algernon Charles (poet); London, Eng. (1837-1909).
- SWOPE, Herbert Bayard (journalist); b. Louis, Mo. (1882-1958).
- SYNGE, John Millington (dramatist); b. Dublin, Ire. (1871-1909).
- TAFT, Robert Alphonso (legislator); b. Cin-cinnati, Ohio (1889-1953).
- TAGORE, Sir Rabindranath (poet); b. Cal-cutta, India (1861-1941).

- RAND-PÉRIGORD**, Charles Maurice de (man); b. Paris, Fr. (1754-1838).
- ANE** (Timur) (Mongol conqueror); Samarkand, Sib. (1336?-1405).
- ATON**, Newton Booth (novelist); b. apolis, Ind. (1869-1946).
- VSKEY** (or **TSCHAIKOWSKY**), Peter Ilich (composer); b. Ural region, 1840-1893).
- EH** (Shawnee Indian chief); b. nr. field, Ohio (1768?-1813).
- ON**, Alfred (1st Baron Tennyson); b. Somersby, Lincs., Eng. (1809-1892).
- Ellen Alicia** (actress); b. Coventry, 1848-1928).
- INI**, Luisa (soprano); b. Florence, 171-1940).
- RAY**, William Makepeace (novelist); Putta, India (1811-1863).
- Dylan Marlais** (poet); b. Caermar-dre, Wales (1914-1953).
- J**, Henry David (naturalist & au-thor); b. Concord, Mass. (1817-1862).
- Jim** (James Francis Thorpe) (athlete); b. nr. Prague, Oklahoma (1888-1953).
- William Tatem, II** (tennis player); b. Philadelphia, Pa. (1893-1953).
- ITTO**, Il (Jacopo Robusti) (painter); b. Florence (1518-1594).
- Tiziano Vecelli** (painter); b. Pieve di Cadore, Venezia, It. (1477-1576).
- Mike** (Avrom Goldbogen) (movie pro-ducer); b. Minneapolis (1909-1958).
- Count Leo** (Lev) Nikolaevich (novelist); b. Tula prov., Rus. (1828-1910).
- NI**, Arturo (orchestra conductor); b. Havana, Cuba (1867-1957).
- E-LAUTREC** (Henri Marie Raymond d'Audoubert-Lautrec Monfa) (painter); b. France (1864-1901).
- Leon** (Lev Davidovich Bronstein) (revolutionary); b. Elisavetgrad, Rus. (1879-1928).
- V**, Ivan Sergeevich (novelist); b. Moscow, Rus. (1818-1883).
- Mark** (Samuel Langhorne Clemens) (author); b. Florida, Mo. (1835-1910).
- William Marcy** (politician); b. New York (1823-1878).
- NO**, Rudolph (Rodolpho d'Antoni) (actor); b. Castellana, It. (1895-1957).
- ERG**, Arthur Hendrick (legislator); b. Grand Rapids, Mich. (1884-1951).
- ILT**, Cornelius (financier); b. Port-land, N. Y. (1794-1877).
- TEN**, John William (dramatist); b. London, Eng. (1901-1957).
- (or VAN DYCK)**, Sir Anthony (painter); b. Antwerp, Hol. (1599-1641).
- WILLIAMS**, Ralph (composer); b. Hampden, Eng. (1872-1958).
- EZ**, Diego Rodríguez de Silva y Esquivel (poet); b. Seville, Sp. (1599-1660).
- Musette** (composer); b. Roncole, Italy (1813-1901).
- Jan** (or Jan van der Meer van der Meulen); b. Delft, Hol. (1632-1675).
- ules** (author); b. Nantes, Fr. (1828-1892).
- VILLA**, Pancho (Doroteo Arango) (bandit); b. Rio Grande, Mex. (1877-1923).
- VILLON**, François (François de Montcorbier) (poet); b. Paris, Fr. (1431-c.1463).
- VINCI**, Leonardo da (painter & scientist); b. Vinci, Tuscany, It. (1452-1519).
- VIRGIL** (or **VERGIL**) (Publius Vergilius Maro) (poet); b. Mantua, Gaul (70-19 B.C.).
- VOLTAIRE** (François Marie Arouet) (author); b. Paris, Fr. (1694-1778).
- VON STROHEIM**, Erich Oswald Hans Carl (actor); b. Vienna, Aus. (1885-1957).
- WAGNER**, Honus (John Wagner) (baseball player); b. Mansfield, Pa. (1874-1955).
- WAGNER**, Wilhelm Richard (composer); b. Leipzig, Ger. (1813-1883).
- WALTON**, Izaak (author); b. Stafford, Eng. (1593-1683).
- WARD**, Fannie (actress); b. St. Louis, Mo. (1872-1952).
- WASHINGTON**, Booker T. (educator); b. Franklin Co., Va. (1856-1915).
- WATSON**, Thomas John (industrialist); b. Campbell, N. Y. (1874-1956).
- WATT**, James (inventor); b. Greenock, Scot. (1736-1819).
- WAYNE**, Anthony (military officer); b. Waynesboro, Pa. (1745-1796).
- WEBER**, Karl Maria Friedrich Ernst von (composer); b. nr. Lübeck, Ger. (1786-1826).
- WEBSTER**, Daniel (statesman); b. Salisbury, N. H. (1782-1852).
- WEBSTER**, Noah (lexicographer); b. West-Hartford, Conn. (1758-1843).
- WEILL**, Kurt (composer); b. Dessau, Ger. (1900-1950).
- WEIZMANN**, Chaim (Israeli statesman); b. Grodno prov., Rus. (1874-1952).
- WELLINGTON**, Duke of (Arthur Wellesley) (statesman); b. Ireland (1769-1852).
- WELLS**, Herbert George (author); b. Brom-ley, Kent, Eng. (1866-1946).
- WESLEY**, John (religious leader); b. Lincoln-shire, Eng. (1703-1791).
- WESTINGHOUSE**, George (inventor); b. Central Bridge, N. Y. (1846-1914).
- WHARTON**, Edith Newbold (nee Jones) (novelist); b. New York City (1862-1937).
- WHISTLER**, James Abbott McNeill (painter); b. Lowell, Mass. (1834-1903).
- WHITE**, William Allen (journalist); b. Em-poria, Kans. (1868-1944).
- WHITMAN**, Walt (Walter) (poet); b. West Hills, N. Y. (1819-1892).
- WHITNEY**, Eli (inventor); b. Westboro, Mass. (1765-1825).
- WHITTIER**, John Greenleaf (poet); b. Haver-hill, Mass. (1807-1892).
- WILDE**, Oscar Fingal O'Flahertie Wills (au-thor); b. Dublin, Ire. (1854-1900).
- WILKINS**, Sir George Hubert (explorer); b. Mt. Bryan East, Australia (1888-1958).
- WILLIAMS**, Roger (clergyman); b. London, Eng. (1603?-1683).
- WILLKIE**, Wendell Lewis (lawyer); b. El-wood, Ind. (1892-1944).
- WINTHROP**, John (1st Gov., Mass. Bay Colony); b. Suffolk, Eng. (1588-1649).
- WISE**, Stephen Samuel (rabbi); b. Buda-pest, Hung. (1874-1949).

WOLFE, Thomas Clayton (novelist); b. Asheville, N. C. (1900-1938).
WOLSEY, Thomas (prelate & statesman); b. Ipswich, Eng. (1475?-1530).
WOOD, Grant (painter); b. Anamosa, Iowa (1892-1942).
WOOLF, Adeline Virginia (nee Stephens) (novelist); b. London, Eng. (1882-1941).
WOOLLCOTT, Alexander (author); b. Phalanx, N. J. (1887-1943).
WORDSWORTH, William (poet); b. Cocker-mouth, Cumb., Eng. (1770-1850).
WRIGHT, Frank Lloyd (architect); b. Richland Center, Wis. (1869-1959).
WRIGHT, Orville (inventor); b. Dayton, Ohio (1871-1948).
WRIGHT, Wilbur (inventor); b. Millville, Ind. (1867-1912).

YEATS, William Butler (poet); b. nr. Dublin, Ire. (1865-1939).
YOUNG, Brigham (religious leader); b. Wingham, Vt. (1801-1877).
YOUNG, Cy (Denton True Young) (base player); b. Gilmore, Ohio (1867-1955).
YOUNG, Robert Ralph (railroad executive); b. Canadian, Tex. (1897-1958).
ZAHARIAS, Mildred ("Babe") (nee Dixon) (athlete); b. Fort Arthur, Tex. (1895-1956).
ZIEGFELD, Florenz (theatrical producer); Chicago, Ill. (1869-1932).
ZOLA, Emile (novelist); b. Paris, Fr. (1854-1902).
ZOROASTER (religious leader); b. Persia (lived about the 6th century B.C.).

American Academy of Arts and Letters

(633 W. 155th St., New York 32, N. Y.)

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CONTRACT BRIDGE

By B. JAY BECKER

Top Record-Holder in Masters' Individual Championship Play

Contract bridge was invented by Harold S. Vanderbilt in 1925. The new game was a great improvement over the parent game, auction bridge, which in turn had been derived from whist, a card game of two centuries standing.

Contract bridge developed rapidly but did not catch fire with the public until the late Ely Culbertson, a promotion genius of the first order, staged a simulated grudge match against Sidney Lenz in 1931. Newspapers everywhere carried daily stories on the hectic match refereed by Lieutenant (now General) Alfred M. Gruenther.

Various systems of bidding sprang up during the first years of contract bridge but after five or six years of experimentation the best features of each were joined to form what is essentially the system in use today. Among the leading contributors to the evolution of present day methods were Vanderbilt, Culbertson, Lenz, Work, Whitehead, Reith, Goren, Blackwood, Roth, Stayman.

Today, bridge is regarded as almost a social necessity. Hundreds of textbooks have been written and many newspapers carry daily bridge columns. It is estimated there are 35 million bridge players in the United States. Sectional, national and international tournaments are conducted by the American Contract Bridge League, governing body of bridge.

EVALUATION

For many years, the chief method of determining the value of a hand was by means of a scale called honor tricks. Culbertson was chief proponent of this method. High cards are, for example, valued as follows:

A = 1 H. T.	K-x = 1/2 H. T.
K-Q = 1 H. T.	Q-J-x = 1/2 H. T.
A-K = 2 H. T.	Q or J = plus value
A-Q = 1 1/2 H. T.	

During the past 15 years the honor trick method has been largely supplanted by the point count method. Point count was devised by Milton Work back in the auction days, but was not generally accepted until Charles H. Goren took a prominent part in bringing it to the attention of the public. The experts had played point count for years, but to the lesser players it was relatively unknown. The introduction of point count has done a great deal to raise the level of bidding skill for the average player.

Point count evaluation divides into two categories: high card points and distributional points. With balanced hands—hands without a void or singleton—the high card point count is both practical and accurate and reflects essentially the true value of a hand.

HIGH CARD POINTS

Ace = 4 points	Queen = 2 points
King = 3 points	Jack = 1 point
Total points in deck = 40	
Points in each suit = 10	
Points in average hand = 10	
Points required for game = 26	
Points required for small slam = 33	
Points required for grand slam = 37	

Opening notrump bids are characterized by distribution which is usually 4-4-3-2, or in some cases 5-3-3-2 and stoppers in all four suits. The required point count is:

Opening 1 N. T. = 16 to 18 points
Opening 2 N. T. = 22 to 24 points
Opening 3 N. T. = 25 to 27 points

With 19, 20 or 21 points, bid one of a suit and jump in notrump over partner's response. Responses to an opening one notrump bid with a balanced hand:

Raise 1 N. T. to 2 N. T. with 8 or 9 points
Raise 1 N. T. to 3 N. T. with 10 to 14 points
Raise 1 N. T. to 6 N. T. with 17 to 20 points
Raise 1 N. T. to 7 N. T. with 21 points or more

DISTRIBUTIONAL POINT COUNT

Two methods of evaluating distributional points are in general use. According to the Goren method 3 points are taken for a void, 2 points for each singleton and 1 point for each doubleton. These are added to the high card point count to determine the total point count of the hand.

According to the Karpin method 1 point is taken for each card in a suit above the ace. These points are then added to the high card points to determine the value of the hand.

As new information is obtained during the bidding, the original distributional point count evaluation may rise or fall. Distributional point count should not be rigidly followed. It is a flexible yardstick.

OPENING SUIT BIDS

The opening bid of one in a suit is usually from 12 to 21 points. All hands containing 14 high card points are competent opening bids. Distributional factors are important in evaluating a hand. Distribution is a key factor in every deal.

In choosing the suit with which to open the bidding, the longest suit is usually first. When two suits are of equal length the higher ranking suit is generally bid. When there are three biddable suits, bid the suit that is chosen is the one directly beneath the singleton in rank.

RESPONSES TO SUIT BIDS

Any new suit named by the responder hand compels the opening bidder to

With 6 points or more the partner opening bidder of one in a suit must response. He may name a new suit, in notrump or raise the opening suit.

A single raise of the opening bidder's notes adequate trump support and 6 points which include distributional. The response of one notrump denotes a balanced hand without adequate trump with 6 to 9 points in high cards. A response of one of a new suit denotes 6 points. The response of two in a new suit denotes 10 to 16 points.

A trump raise of the opening bidder's for example 1 spade—3 spades, denotes four trumps and 13 to 15 points. A response of 2 notrump to the opening bid in a suit denies adequate trump support and represents a balanced hand with 10 to 15 points in high cards, plus 4 points in the remaining three suits. The response of 3 notrump indicates 16 to 18 points and a balanced hand with stoppers in the other three suits.

BIDDABLE SUITS

A five card suit is biddable. Any four card suit which includes four high cards is biddable.

REBIDS BY OPENING BIDDER

A hand opened with one of a suit the opening bidder may identify a minimum type by rebidding one notrump or by rebidding his previous suit in minimum terms. A response by the opening bidder, where he has a level higher than necessary, represents a strong hand containing at least 17

OPENING BID OF TWO IN A SUIT

A bid of two in a suit is forcing to game. It represents a hand which for practical purposes can win the game by itself. The best method to determine whether a hand ranks for a bid is to count the losers, and if the hand then contains enough winners to win the game the hand qualifies as a two. A response to a two bid is 2 notrump if the responder has more than 6 points. In any case he either raises his partner, bids a new suit or jumps in notrump.

OVERCALLS

A bid over an adverse opening bid, when made at the one level, usually ranges in value between 7 and 13 points and indicates a good suit. The overcall in the two level is made with a strong suit and usually contains 12 or 13 points in high cards. In the case of overcalls, the number of winning tricks which are probable is more important than the point count. The overcaller should be subject to a penalty in excess of 500 points in the event he should be doubled. A preemptive double over an adverse opening bid represents at least an opening bid of his own.

BLACKWOOD SLAM CONVENTION

After the partners have agreed definitely or inferentially upon a suit as trump the bid of 4 notrump by either of them is an artificial bid requesting partner to name the number of Aces he has. The responses are as follows:

- No Aces — 5 Clubs
- 1 Ace — 5 Diamonds
- 2 Aces — 5 Hearts
- 3 Aces — 5 Spades
- 4 Aces — 5 Notrump

When the response is followed by a 5 notrump bid it should be construed as a request for the number of Kings. The responses are as follows:

- No Kings — 6 Clubs
- 1 King — 6 Diamonds
- 2 Kings — 6 Hearts
- 3 Kings — 6 Spades
- 4 Kings — 6 Notrump

STAYMAN NOTRUMP CONVENTION

The response of 2 Clubs to partner's opening one notrump bid is an artificial bid requesting the opener to bid a four card major suit. If the opening bidder has no four card major he replies by bidding 2 diamonds with a minimum one notrump bid, or 2 notrump with a maximum notrump bid.

IN GENERAL

Bridge is a partnership game. In bidding, each player tries to represent to his partner the strength or weakness of his hand. Exact bidding will produce exact results. Weak hands are bid weakly; strong hands are bid strongly. Forcing bids must be respected. Partners' bids should be trusted more than the opponents' bids.

High card point count in balanced hands is very accurate. Distributional point count is sometimes treacherous and common sense should be employed where the distributional point count does not appear to give an accurate evaluation of the true value of the hand.

In counting defensive tricks against a suit contract, honor tricks provide a more reliable gauge than point count.

Remember that the important thing in bridge is the number of tricks that are taken, not the number of points a side has. Remember also that all the rules in bridge are made to be broken at the appropriate time. There is no such word as "never" when it comes to stating a general principle. You can be dealt 635,013,559,600 different hands in bridge. No general rules can be expected to cover all possibilities. Imagination and ingenuity are important qualities to be exercised.

Large penalties should be avoided. A game should not be bid unless there is nearly an even chance of making it; a small slam should not be bid unless there is an even chance at least to make it; a grand slam should not be bid unless there is at least a 2 to 1 probability of making it. Play probabilities, and not hunches. Bridge is a scientific game.

SPORTS ORGANIZATIONS AND INFORMATION BUREAUS

- AMATEUR ATHLETIC UNION OF THE U. S. 233 Broadway, New York 7, N. Y.
- AMATEUR BICYCLE LEAGUE OF AMERICA. 2320 Grand Ave., New York 68, N. Y.
- AMATEUR FENCERS LEAGUE OF AMERICA. 310 E. 49th St., New York 17, N. Y.
- AMATEUR HOCKEY ASSN. OF THE U. S. Madison Square Garden, 307 W. 49th St., New York 19, N. Y.
- AMATEUR SKATING UNION OF THE U. S. 512 Physicians and Surgeons Bldg., Minneapolis 2, Minn.
- AMATEUR SOFTBALL ASSN. OF AMERICA. Suite 401, 11 Hill St., Newark 2, N. J.
- AMATEUR TRAPSHOOTING ASSN. OF AMERICA. Vandalia, Ohio
- AMERICAN AMATEUR BASEBALL CONGRESS. Box 44, Battle Creek, Mich.
- AMERICAN BADMINTON ASSN. 905 So. Los Robles Ave., Pasadena, Calif.
- AMERICAN BOWLING CONGRESS. 1572 E. Capitol Drive, Milwaukee 11, Wis.
- AMERICAN CANOE ASSN., 15 Beacon Ave., New Haven, Conn.
- AMERICAN FOOTBALL LEAGUE. 1111 Southland Center, Dallas 1, Tex.
- AMERICAN HOCKEY LEAGUE. Box 190, Hempstead, N. Y.
- AMERICAN HORSE SHOWS ASSN. 40 E. 54th St., New York 22, N. Y.
- AMERICAN KENNEL CLUB. 221 Park Ave. So., New York 3, N. Y.
- AMERICAN LAWN BOWLING ASSN. 3630-D Carmona Ave., Los Angeles 16, Calif.
- AMERICAN LEAGUE (Baseball). 520 Boylston St., Boston 16, Mass.
- AMERICAN MOTORCYCLE ASSOCIATION. 106 Buttles Ave., Columbus 8, Ohio
- AMERICAN POWER BOAT ASSN. 2534 St. Aubin Ave., Detroit 7, Mich.
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- AMERICAN ROQUE LEAGUE, 5439 Vanderbilt Ave., Dallas 6, Texas.
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- BASEBALL COMMISSIONER FORD C. FRICK. 30 Rockefeller Plaza, New York 20, N. Y.
- BILLIARD CONGRESS OF AMERICA. 915 Edison Bldg., Toledo, Ohio.
- BOWLING PROPRIETORS' ASSN. OF AMERICA. Executive Plaza, Park Ridge, Ill.
- EASTERN COLLEGE ATHLETIC CONFERENCE. Hotel Manhattan, 8th Ave. & 45th St., New York 36, N. Y.
- ELIAS BASEBALL BUREAU, 11 West 42d St., New York 36.
- FIELD HOCKEY ASSN. OF AMERICA, 30 Wall St., New York 5, N. Y.
- FISH AND WILDLIFE SERVICE. Dept. of the Interior, Washington 25, D. C.
- GREATER NEW YORK RACING ASSN. SERVICE BUREAU, 300 Park Ave., New York 22, N. Y.
- INTERNATL. AMATEUR ATHLETIC FEDERATION. Halton House, 23 Holborn, London, E. C. 1, England.
- INTERNATIONAL GAME FISH ASSN. Alfred I. duPont Bldg., Miami 32, Fla.
- THE JOCKEY CLUB, 300 Park Ave., New York 22, N. Y.
- LITTLE LEAGUE BASEBALL. Williamsport, Pa.
- NATL. ARCHERY ASSN. OF THE U. S. 20-A Yale Ave., Buffalo 26, N. Y.
- NATL. ASSN. OF AMATEUR OARSMEN. 119 Heiler Parkway, Newark 4, N. J.
- NATL. ASSN. OF ANGLING AND CASTING CLUBS. Box 51, Nashville 2, Tenn.
- NATL. ASSN. OF PROFESSIONAL BASEBALL LEAGUE (Minors). 720 E. Broad St., Columbus 15, Ohio
- NATL. ASSN. OF STATE RACING COMMISSIONERS. 156, Lexington, Ky.
- NATL. BASEBALL CONGRESS. Wichita 1, Kan.
- NATL. BASKETBALL ASSN. Empire State Bldg., N. Y.
- NATL. BOXING ASSN. 402 No. Syracuse St., Hagerstown, Ind.
- NATL. COLLEGIATE ATHLETIC ASSN. 206 Fairfax St., Kansas City 5, Mo.
- NATL. DUCK PIN BOWLING CONGRESS. 1420 New York Ave., N.W., Washington 5, D. C.
- NATL. FIELD ARCHERY ASSN., Rt. 2, Box 514, Redlands, Calif.
- NATL. FOOTBALL LEAGUE. One Rockefeller Plaza, New York 20, N. Y.
- NATL. HOCKEY LEAGUE. Sun Life Bldg., Montreal, Quebec
- NATL. HORSESHOE PITCHERS ASSN. 341 Polk St., Indianapolis, Ind.
- NATL. LEAGUE SERVICE BUREAU (Baseball). Carew Tower, Cincinnati 2, Ohio
- NATL. RIFLE ASSN. OF AMERICA. 1600 Rhode Island St., Washington 6, D. C.
- NATL. SKEET SHOOTING ASSN. 3409 Oak Lawn St., Dallas 19, Texas.
- NATL. SKI ASSN. 1130-16th St., Denver 2, Colo.
- NEW YORK STATE ATHLETIC (BOXING) COMMISSION. 226 W. 47th St., New York 36, N. Y.
- NORTH AMERICAN YACHT RACING UNION. 37 West 42d St., New York 36, N. Y.
- PROFESSIONAL GOLFERS' ASSN. OF AMERICA. Broad and Main St., Dunedin, Fla.
- PROFESSIONAL HORSEMEN'S ASSN. 716 Madison St., New York City.
- RODEO COWBOYS ASSN., 1744 Champa St., Denver 2, Colo.
- ROLLER SKATING RINK OPERATORS ASSN. OF AMERICA. 625 W. Seven Mile Rd., Detroit 3, Mich.
- THOROUGHbred RACING ASSNS. OF THE U. S. 925 Columbus Bldg., New York 17, N. Y.
- U. S. AMATEUR ROLLER SKATING ASSN. 120 West 42d St., New York 18, N. Y.
- U. S. CHESS FEDERATION. 80 E. 11th St., New York 3, N. Y.
- U. S. FIGURE SKATING ASSN. Rm. 517, 30 Huntington St., Boston 16, Mass.
- U. S. GOLF ASSN. 40 E. 38th St., New York 16, N. Y.
- U. S. HANDBALL ASSN. 505 No. Michigan Ave., Chicago
- U. S. LAWN TENNIS ASSN. 120 Broadway, New York 5, N. Y.
- U. S. OLYMPIC ASSN. Olympic House, 57 Park Ave., New York 16, N. Y.
- U. S. POLO ASSN. 250 Park Ave., New York 17, N. Y.
- U. S. PROFESSIONAL LAWN TENNIS ASSN., 37 Wall St., New York 5, N. Y.
- U. S. SOCCER FOOTBALL ASSN. 320 Fifth Ave., New York 17, N. Y.
- U. S. SQUASH RACQUETS ASSN. 1201 Genesee St., Buffalo 2, N. Y.
- U. S. TABLE TENNIS ASSN. 210 Saturn Drive, North Newark, Del.
- U. S. TROTTING ASSN. P.O. Box 2058, Main Post Office, Columbus 16, Ohio
- U. S. VOLLEYBALL ASSN. Rm. 1705, 291 Broadway, New York 7, N. Y.
- WESTERN HOCKEY LEAGUE. Grosvenor House, 500 Wall St., Seattle 1, Wash.
- WOMAN'S INTERNATIONAL BOWLING CONGRESS. Dublin Rd., Columbus 8, Ohio.

SPORTS



For 1960 sports champions and records,
see special section beginning on Page 839.

BASEBALL

POPULAR TRADITION that baseball was invented by Abner Doubleday at Cooperstown, N. Y., in 1839, has been enshrined in the Hall of Fame and National Museum in Cooperstown, N. Y., but remains unproved. It was a game called "Baseball" as played in this country and England before 1839. However, the first team as we know it was played at the Polo Grounds, Hoboken, N. J., on June 19, 1846, between the Knickerbockers and the New York Nine. There was a gradual improvement of baseball and an improvement of playing skill in the next 25 years. Soldiers returning home from the Civil War spread over the country the game they had learned to play in camp. The Yankees have it that the first pitcher to throw a curve was William A. (Candy) Johnson in 1867. The Cincinnati Redlegs were the first all-professional team and in 1869 they played 64 games without a loss. The standard ball of the

same size and weight, still the rule, was adopted in 1872. The first catcher's mask was worn in 1875. The National League was organized in 1876. The first chest protector was donned in 1885. The three-strike rule was put on the books in 1887 and the four-ball ticket to first base came in 1889. The pitching distance, formerly 60 feet, was lengthened to 60 feet 6 inches in 1893 and the rules have been only slightly modified since that time.

The American League, under the vigorous leadership of B. B. Johnson, blossomed forth as a major league in 1901. Judge Kenesaw Mountain Landis, by action of the two major leagues, became Commissioner of Baseball in 1921 and, upon his death (1944), Albert B. Chandler, former United States Senator from Kentucky, was elected to that office (1945). Chandler failed to obtain a new contract, and he was succeeded by Ford C. Frick (1951), the National League president.

PROFESSIONAL BASEBALL GOVERNMENT

NATIONAL LEAGUE—AMERICAN LEAGUE—NATIONAL ASSOCIATION

Ford C. Frick, Commissioner
Charles M. Segar, Secretary-Treasurer
30 Rockefeller Plaza, New York 20, N. Y.

NATIONAL LEAGUE

Warren C. Giles
President-Secretary-Treasurer
Office: 2601 Carew Tower,
Cincinnati 2, Ohio
Public Bureau: Dave Grote, Manager

AMERICAN LEAGUE

Joseph E. Cronin
President-Secretary-Treasurer
Office: 520 Boylston St.,
Boston 16, Mass.
Public Relations: Joseph W. McKenney,
Director

NATIONAL ASSOCIATION

George M. Trautman
President-Treasurer
Carl Lundquist
Director of Public Relations
720 East Broad St., Columbus 15, Ohio

Baseball Statistics

Source: *The Little Red Book of Baseball*, published by The Elias Baseball Bureau, New York City.

Record of World Series Games

Figures in parentheses indicate number of victories for each club. Pitchers named winner and loser, respectively.

1903—BOSTON A. L. (5) vs. PITTSBURGH N. L. (3)

Managers—Jimmy Collins, Boston; Fred Clarke, Pittsburgh

Oct. 1—Pittsburgh (Phillippe).....	7	Boston (Young).....	3	At Boston
Oct. 2—Boston (Dinneen).....	3	Pittsburgh (Leever).....	0	At Boston
Oct. 3—Pittsburgh (Phillippe).....	4	Boston (Hughes).....	2	At Boston
Oct. 6—Pittsburgh (Phillippe).....	5	Boston (Dinneen).....	4	At Pittsburgh
Oct. 7—Boston (Young).....	11	Pittsburgh (Kennedy).....	2	At Pittsburgh
Oct. 8—Boston (Dinneen).....	6	Pittsburgh (Leever).....	3	At Pittsburgh
Oct. 10—Boston (Young).....	7	Pittsburgh (Phillippe).....	3	At Pittsburgh
Oct. 13—Boston (Dinneen).....	3	Pittsburgh (Phillippe).....	0	At Boston

1904—No Series

1905—NEW YORK N. L. (4) vs. PHILADELPHIA A. L. (1)

Managers—John J. McGraw, New York; Connie Mack, Philadelphia.

Oct. 9—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia
Oct. 10—Philadelphia (Bender).....	3	New York (McGinnity).....	0	At New York
Oct. 12—New York (Mathewson).....	9	Philadelphia (Coakley).....	0	At Philadelphia
Oct. 13—New York (McGinnity).....	1	Philadelphia (Plank).....	0	At New York
Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	0	At New York

1906—CHICAGO A. L. (4) vs. CHICAGO N. L. (2)

Managers—Fielder Jones, Chicago A. L.; Frank L. Chance, Chicago N. L.

Oct. 9—Chicago A (Altrock).....	2	Chicago N (Brown).....	1	At Chicago Nat. Pk.
Oct. 10—Chicago N (Reulbach).....	7	Chicago A (White).....	1	At Chicago Am. Pk.
Oct. 11—Chicago A (Walsh).....	3	Chicago N (Pfiester).....	0	At Chicago Nat. Pk.
Oct. 12—Chicago N (Brown).....	1	Chicago A (Altrock).....	0	At Chicago Am. Pk.
Oct. 13—Chicago A (Walsh).....	8	Chicago N (Pfiester).....	6	At Chicago Nat. Pk.
Oct. 14—Chicago A (White).....	8	Chicago N (Brown).....	3	At Chicago Am. Pk.

1907—CHICAGO N. L. (4) vs. DETROIT A. L. (0)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 8—Chicago (tie).....	3	Detroit (tie).....	3	At Chicago (12 inn.)
Oct. 9—Chicago (Pfiester).....	3	Detroit (Mullin).....	1	At Chicago
Oct. 10—Chicago (Reulbach).....	5	Detroit (Siever).....	1	At Chicago
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Detroit
Oct. 12—Chicago (Brown).....	2	Detroit (Mullin).....	0	At Detroit

1908—CHICAGO N. L. (4) vs. DETROIT A. L. (1)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 10—Chicago (Brown).....	10	Detroit (Summers).....	6	At Detroit
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Chicago
Oct. 12—Detroit (Mullin).....	8	Chicago (Pfiester).....	3	At Chicago
Oct. 13—Chicago (Brown).....	3	Detroit (Summers).....	0	At Detroit
Oct. 14—Chicago (Overall).....	2	Detroit (Donovan).....	0	At Detroit

1909—PITTSBURGH N. L. (4) vs. DETROIT A. L. (3)

Managers—Fred Clarke, Pittsburgh; Hugh Jennings, Detroit.

Oct. 8—Pittsburgh (Adams).....	4	Detroit (Mullin).....	1	At Pittsburgh
Oct. 9—Detroit (Donovan).....	7	Pittsburgh (Camnitz).....	2	At Pittsburgh
Oct. 11—Pittsburgh (Maddox).....	8	Detroit (Summers).....	6	At Detroit
Oct. 12—Detroit (Mullin).....	5	Pittsburgh (Leifield).....	0	At Detroit
Oct. 13—Pittsburgh (Adams).....	8	Detroit (Summers).....	4	At Pittsburgh
Oct. 14—Detroit (Mullin).....	5	Pittsburgh (Willis).....	4	At Detroit
Oct. 16—Pittsburgh (Adams).....	8	Detroit (Donovan).....	0	At Detroit

1910—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Managers—Connie Mack, Philadelphia; Frank L. Chance, Chicago.

Philadelphia (Bender).....	4	Chicago (Overall).....	1	At Philadelphia
Philadelphia (Coombs).....	9	Chicago (Brown).....	3	At Philadelphia
Philadelphia (Coombs).....	12	Chicago (McIntire).....	5	At Chicago
Chicago (Brown).....	4	Philadelphia (Bender).....	3	At Chicago (10 inn.)
Philadelphia (Coombs).....	7	Chicago (Brown).....	2	At Chicago

1911—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (2)

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

New York (Mathewson).....	2	Philadelphia (Bender).....	1	At New York
Philadelphia (Plank).....	3	New York (Marquard).....	1	At Philadelphia
Philadelphia (Coombs).....	3	New York (Mathewson).....	2	At New York (11 inn.)
Philadelphia (Bender).....	4	New York (Mathewson).....	2	At Philadelphia
New York (Crandall).....	4	Philadelphia (Plank).....	3	At New York (10 inn.)
Philadelphia (Bender).....	13	New York (Ames).....	2	At Philadelphia

1912—BOSTON A. L. (4) vs. NEW YORK N. L. (3)

Managers—J. Garland Stahl, Boston; John J. McGraw, New York.

Boston (Wood).....	4	New York (Tesreau).....	3	At New York
Boston (tie).....	6	New York (tie).....	6	At Boston (11 inn.)
New York (Marquard).....	2	Boston (O'Brien).....	1	At Boston
Boston (Wood).....	3	New York (Tesreau).....	1	At New York
Boston (Bedient).....	2	New York (Mathewson).....	1	At Boston
New York (Marquard).....	5	Boston (O'Brien).....	2	At New York
New York (Tesreau).....	11	Boston (Wood).....	4	At Boston
Boston (Wood).....	3	New York (Mathewson).....	2	At Boston (10 inn.)

1913—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (1)

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

Philadelphia (Bender).....	6	New York (Marquard).....	4	At New York
New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia (10 inn.)
Philadelphia (Bush).....	8	New York (Tesreau).....	2	At New York
Philadelphia (Bender).....	6	New York (Demaree).....	5	At Philadelphia
Philadelphia (Plank).....	3	New York (Mathewson).....	1	At New York

1914—BOSTON N. L. (4) vs. PHILADELPHIA A. L. (0)

Managers—George T. Stallings, Boston; Connie Mack, Philadelphia.

Boston (Rudolph).....	7	Philadelphia (Bender).....	1	At Philadelphia
Boston (James).....	1	Philadelphia (Plank).....	0	At Philadelphia
Boston (James).....	5	Philadelphia (Bush).....	4	At Boston (12 inn.)
Boston (Rudolph).....	3	Philadelphia (Shawkey).....	1	At Boston

1915—BOSTON A. L. (4) vs. PHILADELPHIA N. L. (1)

Managers—William Carrigan, Boston; Patrick J. Moran, Philadelphia.

Philadelphia (Alexander).....	3	Boston (Shore).....	1	At Philadelphia
Boston (Foster).....	2	Philadelphia (Mayer).....	1	At Philadelphia
Boston (Leonard).....	2	Philadelphia (Alexander).....	1	At Boston
Boston (Shore).....	2	Philadelphia (Chalmers).....	1	At Boston
Boston (Foster).....	5	Philadelphia (Rixey).....	4	At Philadelphia

1916—BOSTON A. L. (4) vs. BROOKLYN N. L. (1)

Managers—William Carrigan, Boston; Wilbert J. Robinson, Brooklyn.

Boston (Shore).....	6	Brooklyn (Marquard).....	5	At Boston
Boston (Ruth).....	2	Brooklyn (Smith).....	1	At Boston (14 inn.)
Brooklyn (Coombs).....	4	Boston (Mays).....	3	At Brooklyn
Boston (Leonard).....	6	Brooklyn (Marquard).....	2	At Brooklyn
Boston (Shore).....	4	Brooklyn (Pfeffer).....	1	At Boston

1917—CHICAGO A. L. (4) vs. NEW YORK N. L. (2)

Managers—Clarence H. Rowland, Chicago; John J. McGraw, New York.

Chicago (Cicotte).....	2	New York (Sallee).....	1	At Chicago
Chicago (Faber).....	7	New York (Anderson).....	2	At Chicago
New York (Benton).....	2	Chicago (Cicotte).....	0	At New York
New York (Schupp).....	5	Chicago (Faber).....	0	At New York
Chicago (Faber).....	8	New York (Sallee).....	5	At Chicago
Chicago (Faber).....	4	New York (Benton).....	2	At New York

1918—BOSTON A. L. (4) vs. CHICAGO N. L. (2)

Managers—Ed Barrow, Boston; Fred Mitchell, Chicago.

Sept. 5—Boston (Ruth).....	1	Chicago (Vaughn).....	0	At Chicago
Sept. 6—Chicago (Tyler).....	3	Boston (Bush).....	1	At Chicago
Sept. 7—Boston (Mays).....	2	Chicago (Vaughn).....	1	At Chicago
Sept. 9—Boston (Ruth).....	3	Chicago (Douglas).....	2	At Boston
Sept. 10—Chicago (Vaughn).....	3	Boston (Jones).....	0	At Boston
Sept. 11—Boston (Mays).....	2	Chicago (Tyler).....	1	At Boston

1919—CINCINNATI N. L. (5) vs. CHICAGO A. L. (3)

Managers—Patrick J. Moran, Cincinnati; William Gleason, Chicago.

Oct. 1—Cincinnati (Ruether).....	9	Chicago (Cicotte).....	1	At Cincinnati
Oct. 2—Cincinnati (Sallee).....	4	Chicago (Williams).....	2	At Cincinnati
Oct. 3—Chicago (Kerr).....	3	Cincinnati (Fisher).....	0	At Chicago
Oct. 4—Cincinnati (Ring).....	2	Chicago (Cicotte).....	0	At Chicago
Oct. 6—Cincinnati (Eller).....	5	Chicago (Williams).....	0	At Chicago
Oct. 7—Chicago (Kerr).....	5	Cincinnati (Ring).....	4	At Cincinnati
Oct. 8—Chicago (Cicotte).....	4	Cincinnati (Sallee).....	1	At Cincinnati
Oct. 9—Cincinnati (Eller).....	10	Chicago (Williams).....	5	At Chicago (10 inn.)

1920—CLEVELAND A. L. (5) vs. BROOKLYN N. L. (2)

Managers—Tris Speaker, Cleveland; Wilbert J. Robinson Brooklyn.

Oct. 5—Cleveland (Coveleskie).....	3	Brooklyn (Marquard).....	1	At Brooklyn
Oct. 6—Brooklyn (Grimes).....	3	Cleveland (Bagby).....	0	At Brooklyn
Oct. 7—Brooklyn (Smith).....	2	Cleveland (Caldwell).....	1	At Brooklyn
Oct. 9—Cleveland (Coveleskie).....	5	Brooklyn (Cadore).....	1	At Cleveland
Oct. 10—Cleveland (Bagby).....	8	Brooklyn (Grimes).....	1	At Cleveland
Oct. 11—Cleveland (Mails).....	1	Brooklyn (Smith).....	0	At Cleveland
Oct. 12—Cleveland (Coveleskie).....	3	Brooklyn (Grimes).....	0	At Cleveland

1921—NEW YORK N. L. (5) vs. NEW YORK A. L. (3)

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 5—New York A (Mays).....	3	New York N (Nehf).....	0	At Polo Grounds
Oct. 6—New York A (Hoyt).....	3	New York N (Douglas).....	0	At Polo Grounds
Oct. 7—New York N (Barnes).....	13	New York A (Quinn).....	5	At Polo Grounds
Oct. 9—New York N (Douglas).....	4	New York A (Mays).....	2	At Polo Grounds
Oct. 10—New York A (Hoyt).....	3	New York N (Nehf).....	1	At Polo Grounds
Oct. 11—New York N (Barnes).....	8	New York A (Shawkey).....	5	At Polo Grounds
Oct. 12—New York N (Douglas).....	2	New York A (Mays).....	1	At Polo Grounds
Oct. 13—New York N (Nehf).....	1	New York A (Hoyt).....	0	At Polo Grounds

1922—NEW YORK N. L. (4) vs. NEW YORK A. L. (0)

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 4—New York N (Ryan).....	3	New York A (Bush).....	2	At Polo Grounds
Oct. 5—New York N (tie).....	3	New York A (tie).....	3	At Polo Grounds (10 inn.)
Oct. 6—New York N (Scott).....	3	New York A (Hoyt).....	0	At Polo Grounds
Oct. 7—New York N (McQuillan).....	4	New York A (Mays).....	3	At Polo Grounds
Oct. 8—New York N (Nehf).....	5	New York A (Bush).....	3	At Polo Grounds

1923—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Miller J. Huggins, New York A. L.; John J. McGraw, New York N. L.

Oct. 10—New York N (Ryan).....	5	New York A (Bush).....	4	At Yankee Stadium
Oct. 11—New York A (Pennock).....	4	New York N (McQuillan).....	2	At Polo Grounds
Oct. 12—New York N (Nehf).....	1	New York A (Jones).....	0	At Yankee Stadium
Oct. 13—New York A (Shawkey).....	8	New York N (Scott).....	4	At Polo Grounds
Oct. 14—New York A (Bush).....	8	New York N (Bentley).....	1	At Yankee Stadium
Oct. 15—New York A (Pennock).....	6	New York N (Nehf).....	4	At Polo Grounds

1924—WASHINGTON A. L. (4) vs. NEW YORK N. L. (3)

Managers—Stanley R. Harris, Washington; John J. McGraw, New York.

Oct. 4—New York (Nehf).....	4	Washington (Johnson).....	3	At Washington (12 inn.)
Oct. 5—Washington (Zachary).....	4	New York (Bentley).....	3	At Washington
Oct. 6—New York (McQuillan).....	6	Washington (Marberry).....	4	At New York
Oct. 7—Washington (Mogridge).....	7	New York (Barnes).....	4	At New York
Oct. 8—New York (Bentley).....	6	Washington (Johnson).....	2	At New York
Oct. 9—Washington (Zachary).....	2	New York (Nehf).....	1	At Washington
Oct. 10—Washington (Johnson).....	4	New York (Bentley).....	3	At Washington (12 inn.)

1925—PITTSBURGH N. L. (4) vs. WASHINGTON A. L. (3)

Managers—William B. McKechnie, Pittsburgh; Stanley R. Harris, Washington.

Washington (Johnson).....	4	Pittsburgh (Meadows).....	1	At Pittsburgh
Pittsburgh (Aldridge).....	3	Washington (Coveleskie).....	2	At Pittsburgh
Washington (Ferguson).....	4	Pittsburgh (Kremer).....	3	At Washington
Washington (Johnson).....	4	Pittsburgh (Yde).....	0	At Washington
Pittsburgh (Aldridge).....	6	Washington (Coveleskie).....	3	At Washington
Pittsburgh (Kremer).....	3	Washington (Ferguson).....	2	At Pittsburgh
Pittsburgh (Kremer).....	9	Washington (Johnson).....	7	At Pittsburgh

1926—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (3)

Managers—Rogers Hornsby, St. Louis; Miller J. Huggins, New York.

New York (Pennock).....	2	St. Louis (Sherdel).....	1	At New York
St. Louis (Alexander).....	6	New York (Shocker).....	2	At New York
St. Louis (Haines).....	4	New York (Ruether).....	0	At St. Louis
New York (Hoyt).....	10	St. Louis (Reinhart).....	5	At St. Louis
New York (Pennock).....	3	St. Louis (Sherdel).....	2	At St. Louis (10 inn.)
St. Louis (Alexander).....	10	New York (Shawkey).....	2	At New York
St. Louis (Haines).....	3	New York (Hoyt).....	2	At New York

1927—NEW YORK A. L. (4) vs. PITTSBURGH N. L. (0)

Managers—Miller J. Huggins, New York; Donie Bush, Pittsburgh.

New York (Hoyt).....	5	Pittsburgh (Kremer).....	4	At Pittsburgh
New York (Pipgras).....	6	Pittsburgh (Aldridge).....	2	At Pittsburgh
New York (Pennock).....	8	Pittsburgh (Meadows).....	1	At New York
New York (Moore).....	4	Pittsburgh (Miljus).....	3	At New York

1928—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (0)

Managers—Miller J. Huggins, New York; William B. McKechnie, St. Louis.

New York (Hoyt).....	4	St. Louis (Sherdel).....	1	At New York
New York (Pipgras).....	9	St. Louis (Alexander).....	3	At New York
New York (Zachary).....	7	St. Louis (Haines).....	3	At St. Louis
New York (Hoyt).....	7	St. Louis (Sherdel).....	3	At St. Louis

1929—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)

Managers—Connie Mack, Philadelphia; Joseph V. McCarthy, Chicago.

Philadelphia (Ehmke).....	3	Chicago (Root).....	1	At Chicago
Philadelphia (Earnshaw).....	9	Chicago (Malone).....	3	At Chicago
Chicago (Bush).....	3	Philadelphia (Earnshaw).....	1	At Philadelphia
Philadelphia (Rommel).....	10	Chicago (Blake).....	8	At Philadelphia
Philadelphia (Walberg).....	3	Chicago (Malone).....	2	At Philadelphia

1930—PHILADELPHIA A. L. (4) vs. ST. LOUIS N. L. (2)

Managers—Connie Mack, Philadelphia; Gabby Street, St. Louis.

Philadelphia (Grove).....	5	St. Louis (Grimes).....	2	At Philadelphia
Philadelphia (Earnshaw).....	6	St. Louis (Rhem).....	1	At Philadelphia
St. Louis (Grimes).....	5	Philadelphia (Walberg).....	0	At St. Louis
St. Louis (Haines).....	3	Philadelphia (Grove).....	1	At St. Louis
Philadelphia (Grove).....	2	St. Louis (Grimes).....	0	At St. Louis
Philadelphia (Earnshaw).....	8	St. Louis (Hallahan).....	1	At Philadelphia

1931—ST. LOUIS N. L. (4) vs. PHILADELPHIA A. L. (3)

Managers—Gabby Street, St. Louis; Connie Mack, Philadelphia.

Philadelphia (Grove).....	6	St. Louis (Derringer).....	2	At St. Louis
St. Louis (Hallahan).....	2	Philadelphia (Earnshaw).....	0	At St. Louis
St. Louis (Grimes).....	5	Philadelphia (Grove).....	2	At Philadelphia
Philadelphia (Earnshaw).....	3	St. Louis (Johnson).....	0	At Philadelphia
St. Louis (Hallahan).....	5	Philadelphia (Hoyt).....	1	At Philadelphia
Philadelphia (Grove).....	8	St. Louis (Derringer).....	1	At St. Louis
St. Louis (Grimes).....	4	Philadelphia (Earnshaw).....	2	At St. Louis

1932—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Managers—Joseph V. McCarthy, New York; Charles J. Grimm, Chicago.

New York (Ruffing).....	12	Chicago (Bush).....	6	At New York
New York (Gomez).....	5	Chicago (Warneke).....	2	At New York
New York (Pipgras).....	7	Chicago (Root).....	5	At Chicago
New York (Moore).....	13	Chicago (May).....	6	At Chicago

1933—NEW YORK N. L. (4) vs. WASHINGTON A. L. (1)

Managers—William H. Terry, New York; Joseph E. Cronin, Washington.

Oct. 3—New York (Hubbell).....	4	Washington (Stewart).....	2	At New York
Oct. 4—New York (Schumacher).....	6	Washington (Crowder).....	1	At New York
Oct. 5—Washington (Whitehill).....	4	New York (Fitzsimmons).....	0	At Washington
Oct. 6—New York (Hubbell).....	2	Washington (Weaver).....	1	At Washington (11 inn.)
Oct. 7—New York (Luque).....	4	Washington (Russell).....	3	At Washington (10 inn.)

1934—ST. LOUIS N. L. (4) vs. DETROIT A. L. (3)

Managers—Frank F. Frisch, St. Louis; Gordon S. Cochrane, Detroit.

Oct. 3—St. Louis (J. Dean).....	8	Detroit (Crowder).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	3	St. Louis (W. Walker).....	2	At Detroit (12 inn.)
Oct. 5—St. Louis (P. Dean).....	4	Detroit (Bridges).....	1	At St. Louis
Oct. 6—Detroit (Auker).....	10	St. Louis (W. Walker).....	4	At St. Louis
Oct. 7—Detroit (Bridges).....	3	St. Louis (J. Dean).....	1	At St. Louis
Oct. 8—St. Louis (P. Dean).....	4	Detroit (Rowe).....	3	At Detroit
Oct. 9—St. Louis (J. Dean).....	11	Detroit (Auker).....	0	At Detroit

1935—DETROIT A. L. (4) vs. CHICAGO N. L. (2)

Managers—Gordon S. Cochrane, Detroit; Charles J. Grimm, Chicago.

Oct. 2—Chicago (Warneke).....	3	Detroit (Rowe).....	0	At Detroit
Oct. 3—Detroit (Bridges).....	8	Chicago (Root).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	6	Chicago (French).....	5	At Chicago (11 inn.)
Oct. 5—Detroit (Crowder).....	2	Chicago (Carleton).....	1	At Chicago
Oct. 6—Chicago (Warneke).....	3	Detroit (Rowe).....	1	At Chicago
Oct. 7—Detroit (Bridges).....	4	Chicago (French).....	3	At Detroit

1936—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Joseph V. McCarthy, New York A. L.; William H. Terry, New York N. L.

Sept. 30—New York N (Hubbell).....	6	New York A (Ruffing).....	1	At Polo Grounds
Oct. 2—New York A (Gomez).....	18	New York N (Schumacher).....	4	At Polo Grounds
Oct. 3—New York A (Hadley).....	2	New York N (Fitzsimmons).....	1	At Yankee Stadium
Oct. 4—New York A (Pearson).....	5	New York N (Hubbell).....	2	At Yankee Stadium
Oct. 5—New York N (Schumacher).....	5	New York A (Malone).....	4	At Yankee Stadium (10 inn.)
Oct. 6—New York A (Gomez).....	13	New York N (Fitzsimmons).....	5	At Polo Grounds

1937—NEW YORK A. L. (4) vs. NEW YORK N. L. (1)

Managers—Joseph V. McCarthy, New York A. L.; William H. Terry, New York N. L.

Oct. 6—New York A (Gomez).....	8	New York N (Hubbell).....	1	At Yankee Stadium
Oct. 7—New York A (Ruffing).....	8	New York N (Melton).....	1	At Yankee Stadium
Oct. 8—New York A (Pearson).....	5	New York N (Schumacher).....	1	At Polo Grounds
Oct. 9—New York N (Hubbell).....	7	New York A (Hadley).....	3	At Polo Grounds
Oct. 10—New York A (Gomez).....	4	New York N (Melton).....	2	At Polo Grounds

1938—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)

Managers—Joseph V. McCarthy, New York; Gabby Hartnett, Chicago.

Oct. 5—New York (Ruffing).....	3	Chicago (Lee).....	1	At Chicago
Oct. 6—New York (Gomez).....	6	Chicago (Dean).....	3	At Chicago
Oct. 8—New York (Pearson).....	5	Chicago (Bryant).....	2	At New York
Oct. 9—New York (Ruffing).....	8	Chicago (Lee).....	3	At New York

1939—NEW YORK A. L. (4) vs. CINCINNATI N. L. (0)

Managers—Joseph V. McCarthy, New York; William B. McKechnie, Cincinnati.

Oct. 4—New York (Ruffing).....	2	Cincinnati (Derringer).....	1	At New York
Oct. 5—New York (Pearson).....	4	Cincinnati (Walters).....	0	At New York
Oct. 7—New York (Hadley).....	7	Cincinnati (Thompson).....	3	At Cincinnati
Oct. 8—New York (Murphy).....	7	Cincinnati (Walters).....	4	At Cincinnati (10 inn.)

1940—CINCINNATI N. L. (4) vs. DETROIT A. L. (3)

Managers—William B. McKechnie, Cincinnati; Del Baker, Detroit.

Oct. 2—Detroit (Newsom).....	7	Cincinnati (Derringer).....	2	At Cincinnati
Oct. 3—Cincinnati (Walters).....	5	Detroit (Rowe).....	3	At Cincinnati
Oct. 4—Detroit (Bridges).....	7	Cincinnati (Turner).....	4	At Detroit
Oct. 5—Cincinnati (Derringer).....	5	Detroit (Trout).....	2	At Detroit
Oct. 6—Detroit (Newsom).....	8	Cincinnati (Thompson).....	0	At Detroit
Oct. 7—Cincinnati (Walters).....	4	Detroit (Rowe).....	0	At Cincinnati
Oct. 8—Cincinnati (Derringer).....	2	Detroit (Newsom).....	1	At Cincinnati

1941—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

Managers—Joseph V. McCarthy, New York; Leo E. Durocher, Brooklyn.

Oct. 1—New York (Ruffing).....	3	Brooklyn (Davis).....	2	At New York
Oct. 2—Brooklyn (Wyatt).....	3	New York (Chandler).....	2	At New York
Oct. 4—New York (Russo).....	2	Brooklyn (Casey).....	1	At Brooklyn
Oct. 5—New York (Murphy).....	7	Brooklyn (Casey).....	4	At Brooklyn
Oct. 6—New York (Bonham).....	3	Brooklyn (Wyatt).....	1	At Brooklyn

1942—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (1)

Managers—William Southworth, St. Louis; Joseph V. McCarthy, New York.

New York (Ruffing).....	7	St. Louis (M. Cooper).....	4	At St. Louis
St. Louis (Beazley).....	4	New York (Bonham).....	3	At St. Louis
St. Louis (White).....	2	New York (Chandler).....	0	At New York
St. Louis (Lanier).....	9	New York (Donald).....	6	At New York
St. Louis (Beazley).....	4	New York (Ruffing).....	2	At New York

1943—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (1)

Managers—Joseph V. McCarthy, New York; William Southworth, St. Louis.

New York (Chandler).....	4	St. Louis (Lanier).....	2	At New York
St. Louis (M. Cooper).....	4	New York (Bonham).....	3	At New York
New York (Borowy).....	6	St. Louis (Brazle).....	2	At New York
New York (Russo).....	2	St. Louis (Brecheen).....	1	At St. Louis
New York (Chandler).....	2	St. Louis (M. Cooper).....	0	At St. Louis

1944—ST. LOUIS N. L. (4) vs. ST. LOUIS A. L. (2)

Managers—William Southworth, St. Louis N. L.; Luke Sewell, St. Louis A. L.

St. Louis A (Galehouse).....	2	St. Louis N (M. Cooper).....	1	At Sportsman's Park
St. Louis N (Donnelly).....	3	St. Louis A (Muncrief).....	2	At Sportsman's Pk. (11 inn.)
St. Louis A (Kramer).....	6	St. Louis N (Wilks).....	2	At Sportsman's Park
St. Louis N (Brecheen).....	5	St. Louis A (Jakucki).....	1	At Sportsman's Park
St. Louis N (M. Cooper).....	2	St. Louis A (Galehouse).....	0	At Sportsman's Park
St. Louis N (Lanier).....	3	St. Louis A (Potter).....	1	At Sportsman's Park

1945—DETROIT A. L. (4) vs. CHICAGO N. L. (3)

Managers—Steve O'Neill, Detroit; Charles J. Grimm, Chicago.

Chicago (Borowy).....	9	Detroit (Newhouser).....	0	At Detroit
Detroit (Trucks).....	4	Chicago (Wyse).....	1	At Detroit
Chicago (Passeau).....	3	Detroit (Overmire).....	0	At Detroit
Detroit (Trout).....	4	Chicago (Prim).....	1	At Chicago
Detroit (Newhouser).....	8	Chicago (Borowy).....	4	At Chicago
Chicago (Borowy).....	8	Detroit (Trout).....	7	At Chicago (12 inn.)
Detroit (Newhouser).....	9	Chicago (Borowy).....	3	At Chicago

1946—ST. LOUIS N. L. (4) vs. BOSTON A. L. (3)

Managers—Eddie Dyer, St. Louis; Joseph E. Cronin, Boston.

Boston (Johnson).....	3	St. Louis (Pollet).....	2	At St. Louis (10 inn.)
St. Louis (Brecheen).....	3	Boston (Harris).....	0	At St. Louis
Boston (Ferriss).....	4	St. Louis (Dickson).....	0	At Boston
St. Louis (Munger).....	12	Boston (Hughson).....	3	At Boston
Boston (Dobson).....	6	St. Louis (Brazle).....	3	At Boston
St. Louis (Brecheen).....	4	Boston (Harris).....	1	At St. Louis
St. Louis (Brecheen).....	4	Boston (Klinger).....	3	At St. Louis

1947—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)

Managers—Stanley R. Harris, New York; Burton E. Shotton, Brooklyn.

New York (Shea).....	5	Brooklyn (Branca).....	3	At New York
New York (Reynolds).....	10	Brooklyn (Lombardi).....	3	At New York
Brooklyn (Casey).....	9	New York (Newsom).....	8	At Brooklyn
Brooklyn (Casey).....	3	New York (Bevens).....	2	At Brooklyn
New York (Shea).....	2	Brooklyn (Barney).....	1	At Brooklyn
Brooklyn (Branca).....	8	New York (Page).....	6	At New York
New York (Page).....	5	Brooklyn (Gregg).....	2	At New York

1948—CLEVELAND A. L. (4) vs. BOSTON N. L. (2)

Managers—Lou Boudreau, Cleveland; William Southworth, Boston.

Boston (Sain).....	1	Cleveland (Feller).....	0	At Boston
Cleveland (Lemon).....	4	Boston (Spahn).....	1	At Boston
Cleveland (Bearden).....	2	Boston (Bickford).....	0	At Cleveland
Cleveland (Gromek).....	2	Boston (Sain).....	1	At Cleveland
Boston (Spahn).....	11	Cleveland (Feller).....	5	At Cleveland
Cleveland (Lemon).....	4	Boston (Voiselle).....	3	At Boston

1949—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

Managers—Casey Stengel, New York; Burton E. Shotton, Brooklyn.

Oct. 5—New York (Reynolds)	1	Brooklyn (Newcombe)	0	At New York
Oct. 6—Brooklyn (Roe)	1	New York (Raschi)	0	At New York
Oct. 7—New York (Page)	4	Brooklyn (Branca)	3	At Brooklyn
Oct. 8—New York (Lopat)	6	Brooklyn (Newcombe)	4	At Brooklyn
Oct. 9—New York (Raschi)	10	Brooklyn (Barney)	6	At Brooklyn

1950—NEW YORK A. L. (4) vs. PHILADELPHIA N. L. (0)

Managers—Casey Stengel, New York; Edwin M. Sawyer, Philadelphia.

Oct. 4—New York (Raschi)	1	Philadelphia (Konstanty)	0	At Philadelphia
Oct. 5—New York (Reynolds)	2	Philadelphia (Roberts)	1	At Philadelphia (10)
Oct. 6—New York (Ferrick)	3	Philadelphia (Meyer)	2	At New York
Oct. 7—New York (Ford)	5	Philadelphia (Miller)	2	At New York

1951—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Casey Stengel, New York A. L.; Leo E. Durocher, New York N. L.

Oct. 4—New York N (Koslo)	5	New York A (Reynolds)	1	At Yankee Stadium
Oct. 5—New York A (Lopat)	3	New York N (Jansen)	1	At Yankee Stadium
Oct. 6—New York N (Hearn)	6	New York A (Raschi)	2	At Polo Grounds
Oct. 8—New York A (Reynolds)	6	New York N (Maglie)	2	At Polo Grounds
Oct. 9—New York A (Lopat)	13	New York N (Jansen)	1	At Polo Ground
Oct. 10—New York A (Raschi)	4	New York N (Koslo)	3	At Yankee Stadium

1952—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)

Managers—Casey Stengel, New York; Charles W. Dressen, Brooklyn.

Oct. 1—Brooklyn (Black)	4	New York (Reynolds)	2	At Brooklyn
Oct. 2—New York (Raschi)	7	Brooklyn (Erskine)	1	At Brooklyn
Oct. 3—Brooklyn (Roe)	5	New York (Lopat)	3	At New York
Oct. 4—New York (Reynolds)	2	Brooklyn (Black)	0	At New York
Oct. 5—Brooklyn (Erskine)	6	New York (Sain)	5	At New York (12 inn.)
Oct. 6—New York (Raschi)	3	Brooklyn (Loes)	2	At Brooklyn
Oct. 7—New York (Reynolds)	4	Brooklyn (Black)	2	At Brooklyn

1953—NEW YORK A. L. (4) vs. BROOKLYN N. L. (2)

Managers—Casey Stengel, New York; Charles W. Dressen, Brooklyn.

Sept. 30—New York (Sain)	9	Brooklyn (Labine)	5	At New York
Oct. 1—New York (Lopat)	4	Brooklyn (Roe)	2	At New York
Oct. 2—Brooklyn (Erskine)	3	New York (Raschi)	2	At Brooklyn
Oct. 3—Brooklyn (Loes)	7	New York (Ford)	3	At Brooklyn
Oct. 4—New York (McDonald)	11	Brooklyn (Podres)	7	At Brooklyn
Oct. 5—New York (Reynolds)	4	Brooklyn (Labine)	3	At New York

1954—NEW YORK N. L. (4) vs. CLEVELAND A. L. (0)

Managers—Leo E. Durocher, New York; Al Lopez, Cleveland.

Sept. 29—New York (Grissom)	5	Cleveland (Lemon)	2	At New York
Sept. 30—New York (Antonelli)	3	Cleveland (Wynn)	1	At New York
Oct. 1—New York (Gomez)	6	Cleveland (Garcia)	2	At Cleveland
Oct. 2—New York (Liddle)	7	Cleveland (Lemon)	4	At Cleveland

1955—BROOKLYN N. L. (4) vs. NEW YORK A. L. (3)

Managers—Walter Alston, Brooklyn; Casey Stengel, New York.

Sept. 28—New York (Ford)	6	Brooklyn (Newcombe)	5	At New York
Sept. 29—New York (Byrne)	4	Brooklyn (Loes)	2	At New York
Sept. 30—Brooklyn (Podres)	8	New York (Turley)	3	At Brooklyn
Oct. 1—Brooklyn (Labine)	8	New York (Larsen)	5	At Brooklyn
Oct. 2—Brooklyn (Craig)	5	New York (Grim)	3	At Brooklyn
Oct. 3—New York (Ford)	5	Brooklyn (Spoonier)	1	At New York
Oct. 4—Brooklyn (Podres)	2	New York (Byrne)	0	At New York

1956—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)

Managers—Casey Stengel, New York; Walter Alston, Brooklyn.

Oct. 3—Brooklyn (Maglie)	6	New York (Ford)	3	At Brooklyn
Oct. 5—Brooklyn (Bessent)	13	New York (Morgan)	8	At Brooklyn
Oct. 6—New York (Ford)	5	Brooklyn (Craig)	3	At New York
Oct. 7—New York (Sturdivant)	6	Brooklyn (Erskine)	2	At New York
Oct. 8—New York (Larsen)	2	Brooklyn (Maglie)	0	At New York
Oct. 9—Brooklyn (Labine)	1	New York (Turley)	0	At Brooklyn (10 Inn.)
Oct. 10—New York (Kucks)	9	Brooklyn (Newcombe)	0	At Brooklyn

1957—MILWAUKEE N. L. (4) vs. NEW YORK A. L. (3)

Managers—Fred Haney, Milwaukee; Casey Stengel, New York.

New York (Ford).....	3	Milwaukee (Spahn).....	1	At New York
Milwaukee (Burdette).....	4	New York (Shantz).....	2	At New York
New York (Larsen).....	12	Milwaukee (Buhl).....	3	At Milwaukee
Milwaukee (Spahn).....	7	New York (Grim).....	5	At Milwaukee (10 inn.)
Milwaukee (Burdette).....	1	New York (Ford).....	0	At Milwaukee
New York (Turley).....	3	Milwaukee (Johnson).....	2	At New York
Milwaukee (Burdette).....	5	New York (Larsen).....	0	At New York

1958—NEW YORK A. L. (4) vs. MILWAUKEE N. L. (3)

Managers—Casey Stengel, New York; Fred Haney, Milwaukee.

Milwaukee (Spahn).....	4	New York (Duren).....	3	At Milwaukee (10 inn.)
Milwaukee (Burdette).....	13	New York (Turley).....	5	At Milwaukee
New York (Larsen).....	4	Milwaukee (Rush).....	0	At New York
Milwaukee (Spahn).....	3	New York (Ford).....	0	At New York
New York (Turley).....	7	Milwaukee (Burdette).....	0	At New York
New York (Duren).....	4	Milwaukee (Spahn).....	3	At Milwaukee (10 inn.)
New York (Turley).....	6	Milwaukee (Burdette).....	2	At Milwaukee

1959—LOS ANGELES N. L. (4) vs. CHICAGO A. L. (2)

Managers—Walter Alston, Los Angeles; Al Lopez, Chicago

Chicago (Wynn).....	11	Los Angeles (Craig).....	0	At Chicago
Los Angeles (Podres).....	4	Chicago (Shaw).....	3	At Chicago
Los Angeles (Drysdale).....	3	Chicago (Donovan).....	1	At Los Angeles
Los Angeles (Sherry).....	5	Chicago (Staley).....	4	At Los Angeles
Chicago (Shaw).....	1	Los Angeles (Koufax).....	0	At Los Angeles
Los Angeles (Sherry).....	9	Chicago (Wynn).....	3	At Chicago

(For 1960 World Series see index)

World Series Club Standing (Through 1959)

Series	Won	Lost	Pct.	Series	Won	Lost	Pct.
Los Angeles (N) ..	1	0	1.000	Washington (A) ..	3	1	.333
Los Angeles (A) ..	6	5	.833	Detroit (A) ..	7	2	.286
Los Angeles (A) ..	24	18	.667	Chicago (N) ..	10	2	.200
Los Angeles (N) ..	9	6	.667	Brooklyn (N) ..	9	1	.111
Los Angeles (N) ..	3	2	.667	St. Louis (A) ..	1	0	.000
Los Angeles (A) ..	3	2	.667	Philadelphia (N) ..	2	0	.000
Los Angeles (A) ..	8	5	.625				
Los Angeles (N) ..	2	1	.500				
Los Angeles (N) ..	2	1	.500				
Los Angeles (N) ..	4	2	.500				
Los Angeles (A) ..	4	2	.500				
Los Angeles (N) ..	14	5	.357				

RECAPITULATION

	Won
American League	35
National League	21

MAJOR LEAGUE STATISTICS

—Left-field foul line; cf—center field; rf—right-field foul line. (2)—Indicates double-header.

American League

Distance, feet	Seating capacity	Record attendance†	Visiting club	Date
If cf rf				
Los Angeles—Memorial Stadium.....	309 410 309.....	47,778	46,796.....	New York (2)..... May 16, 1954
Boston—Fenway Park.....	315 420 302.....	34,819	41,766.....	New York (2)..... Aug. 12, 1934
Chicago—Comiskey Park.....	352 415 352.....	46,550	54,215.....	New York (2)..... July 19, 1953
Los Angeles—Municipal Stadium.....	320 410 320.....	73,811	84,587.....	New York (2)..... Sept. 12, 1954
New York—Tiger Stadium.....	340 440 325.....	52,904	58,369.....	New York (2)..... July 20, 1947
Los Angeles—Municipal Stadium.....	330 421 353.....	30,611	33,585.....	New York (2, night) July 24, 1955
Milwaukee—Yankee Stadium.....	301 461 296.....	70,000	81,841.....	Boston (2)..... May 30, 1938
Los Angeles—Griffith Stadium.....	350 401 320.....	28,669	35,563.....	New York (2)..... July 4, 1936

National League

Distance, feet	Seating capacity	Record attendance†	Visiting club	Date
If cf rf				
Los Angeles—Wrigley Field.....	355 400 353.....	36,755	46,965.....	Pittsburgh (2)..... May 31, 1948
Los Angeles—Crosley Field.....	328 387 366.....	30,322	36,961.....	Pittsburgh (2)..... Apr. 27, 1947
Los Angeles—Memorial Coliseum*.....	251 420 300.....	92,500	78,672.....	San Francisco..... Apr. 18, 1958
Los Angeles—County Stadium.....	320 402 315.....	43,827	48,642.....	Philadelphia..... Sept. 27, 1959
Los Angeles—Connie Mack Stadium.....	334 447 329.....	33,585	40,720.....	Brooklyn (2)..... May 11, 1947
Los Angeles—Forbes Field.....	365 457 300.....	35,000	44,932.....	Brooklyn..... Sept. 23, 1956
Los Angeles—Busch Stadium.....	351 426 310.....	30,500	45,770.....	Chicago (2)..... July 12, 1931
Los Angeles—Candlestick Park.....	335 415 335.....	42,500	42,269.....	St. Louis..... Apr. 12, 1960

† Regular season.

National League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost
1876	Chicago	Albert G. Spalding	52	14	.788	1918	Chicago	Fred L. Mitchell	84	45
1877	Boston	Harry Wright	31	17	.646	1919*	Cincinnati	Patrick J. Moran	96	44
1878	Boston	Harry Wright	41	19	.683	1920	Brooklyn	Wilbert Robinson	93	61
1879	Providence	George Wright	59	25	.702	1921*	New York	John J. McGraw	94	59
1880	Chicago	Adrian C. Anson	67	17	.798	1922*	New York	John J. McGraw	93	61
1881	Chicago	Adrian C. Anson	56	28	.667	1923	New York	John J. McGraw	95	58
1882	Chicago	Adrian C. Anson	55	29	.655	1924	New York	John J. McGraw	93	60
1883	Boston	John F. Morrill	63	35	.643	1925*	Pittsburgh	William B. McKechnie	95	58
1884	Providence	Frank C. Bancroft	84	28	.750	1926*	St. Louis	Rogers Hornsby	89	65
1885	Chicago	Adrian C. Anson	87	25	.777	1927	Pittsburgh	Owen J. Bush	94	60
1886	Chicago	Adrian C. Anson	90	34	.726	1928	St. Louis	William B. McKechnie	95	59
1887	Detroit	W. H. Watkins	79	45	.637	1929	Chicago	Joseph V. McCarthy	98	54
1888	New York	James J. Mutrie	84	47	.641	1930	St. Louis	Charles E. Street	92	62
1889	New York	James J. Mutrie	83	43	.659	1931*	St. Louis	Charles E. Street	101	55
1890	Brooklyn	William H. McGunnigle	86	43	.667	1932	Chicago	Charles J. Grimm	90	64
1891	Boston	Frank G. Selee	87	51	.630	1933*	New York	William H. Terry	91	61
1892	Boston	Frank G. Selee	102	48	.680	1934*	St. Louis	Frank F. Frisch	95	58
1893	Boston	Frank G. Selee	86	43	.667	1935	Chicago	Charles J. Grimm	100	54
1894	Baltimore	Edward H. Hanlon	89	39	.695	1936	New York	William H. Terry	92	61
1895	Baltimore	Edward H. Hanlon	87	43	.669	1937	New York	William H. Terry	95	57
1896	Baltimore	Edward H. Hanlon	90	39	.698	1938	Chicago	Charles L. Hartnett	89	63
1897	Boston	Frank G. Selee	93	39	.705	1939	Cincinnati	William B. McKechnie	97	57
1898	Boston	Frank G. Selee	102	47	.685	1940*	Cincinnati	William B. McKechnie	100	53
1899	Brooklyn	Edward H. Hanlon	88	42	.677	1941	Brooklyn	Leo E. Durocher	100	53
1900	Brooklyn	Edward H. Hanlon	82	54	.603	1942*	St. Louis	William H. Southworth	106	47
1901	Pittsburgh	Fred C. Clarke	90	49	.647	1943	St. Louis	William H. Southworth	105	47
1902	Pittsburgh	Fred C. Clarke	103	36	.741	1944*	St. Louis	William H. Southworth	105	47
1903	Pittsburgh	Fred C. Clarke	91	49	.650	1945	Chicago	Charles J. Grimm	98	55
1904†	New York	John J. McGraw	106	47	.693	1946*	St. Louis	Edwin H. Dyer	98	55
1905*	New York	John J. McGraw	105	48	.686	1947	Brooklyn	Burton E. Shotton	94	66
1906	Chicago	Frank L. Chance	116	36	.763	1948	Boston	William H. Southworth	91	66
1907*	Chicago	Frank L. Chance	107	45	.704	1949	Brooklyn	Burton E. Shotton	97	55
1908*	Chicago	Frank L. Chance	99	55	.643	1950	Philadelphia	Edwin M. Sawyer	91	68
1909*	Pittsburgh	Fred C. Clarke	110	42	.724	1951	New York	Leo E. Durocher	98	55
1910	Chicago	Frank L. Chance	104	50	.675	1952	Brooklyn	Charles W. Dressen	96	55
1911	New York	John J. McGraw	99	54	.647	1953	Brooklyn	Charles W. Dressen	99	55
1912	New York	John J. McGraw	103	48	.682	1954*	New York	Leo E. Durocher	97	55
1913	New York	John J. McGraw	101	51	.664	1955*	Brooklyn	Walter Alston	98	55
1914*	Boston	George T. Stallings	94	59	.614	1956	Brooklyn	Walter Alston	93	66
1915	Philadelphia	Patrick J. Moran	90	62	.592	1957*	Milwaukee	Fred Haney	95	55
1916	Brooklyn	Wilbert Robinson	94	60	.610	1958	Milwaukee	Fred Haney	92	66
1917	New York	John J. McGraw	98	56	.636	1959*	Los Angeles	Walter Alston	88	66

* World Series winner. † No World Series.

MOST VALUABLE PLAYERS

(Baseball Writers Association selections)

American League		National League	
1931	Lefty Grove, Philadelphia	1950	Phil Rizzuto, New York
1932-33	Jimmy Foxx, Philadelphia	1951	Yogi Berra, New York
1934	Mickey Cochrane, Detroit	1952	Bobby Shantz, Philadelphia
1935	Hank Greenberg, Detroit	1953	Al Rosen, Cleveland
1936	Lou Gehrig, New York	1954-55	Yogi Berra, New York
1937	Charley Gehringer, Detroit	1956-57	Mickey Mantle, New York
1938	Jimmy Foxx, Boston	1958	Jackie Jensen, Boston
1939	Joe DiMaggio, New York	1959	Nellie Fox, Chicago
1940	Hank Greenberg, Detroit		
1941	Joe DiMaggio, New York		
1942	Joe Gordon, New York		
1943	Spurgeon Chandler, New York		
1944-45	Hal Newhouser, Detroit		
1946	Ted Williams, Boston		
1947	Joe DiMaggio, New York		
1948	Lou Boudreau, Cleveland		
1949	Ted Williams, Boston		

American League Pennant Winners

Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
Clark C. Griffith	83	53	.610	1931	Philadelphia	Connie Mack	107	45	.704
Connie Mack	83	53	.610	1932*	New York	Joseph V. McCarthy	107	47	.695
James J. Collins	91	47	.659	1933	Washington	Joseph E. Cronin	99	53	.651
James J. Collins	95	59	.617	1934	Detroit	Gordon S. Cochrane	101	53	.656
Connie Mack	92	56	.622	1935*	Detroit	Gordon S. Cochrane	93	58	.616
Fielder A. Jones	93	58	.616	1936*	New York	Joseph V. McCarthy	102	51	.667
Hugh A. Jennings	92	58	.613	1937*	New York	Joseph V. McCarthy	102	52	.662
Hugh A. Jennings	90	63	.588	1938*	New York	Joseph V. McCarthy	99	53	.651
Hugh A. Jennings	98	54	.645	1939*	New York	Joseph V. McCarthy	106	45	.702
Connie Mack	102	48	.680	1940	Detroit	Delmar D. Baker	90	64	.584
Connie Mack	101	50	.669	1941*	New York	Joseph V. McCarthy	101	53	.656
J. Garland Stahl	105	47	.691	1942	New York	Joseph V. McCarthy	103	51	.669
Connie Mack	96	57	.627	1943*	New York	Joseph V. McCarthy	98	56	.636
Connie Mack	99	53	.651	1944	St. Louis	James L. Sewell	89	65	.578
William F. Carrigan	101	50	.669	1945*	Detroit	Stephen F. O'Neill	88	65	.575
William F. Carrigan	91	63	.591	1946	Boston	Joseph E. Cronin	104	50	.675
Clarence H. Rowland	100	54	.649	1947*	New York	Stanley R. Harris	97	57	.630
Edward G. Barrow	75	51	.595	1948*	Cleveland	Louis Boudreau	97	58	.626
William Gleason	88	52	.629	1949*	New York	Casey Stengel	97	57	.630
Tris E. Speaker	98	56	.636	1950*	New York	Casey Stengel	98	56	.636
Miller J. Huggins	98	55	.641	1951*	New York	Casey Stengel	98	56	.636
Miller J. Huggins	94	60	.610	1952*	New York	Casey Stengel	95	59	.617
Miller J. Huggins	98	54	.645	1953*	New York	Casey Stengel	99	52	.656
Stanley R. Harris	92	62	.597	1954	Cleveland	Al Lopez	111	43	.721
Stanley R. Harris	96	55	.636	1955	New York	Casey Stengel	96	58	.623
Miller J. Huggins	91	63	.591	1956*	New York	Casey Stengel	97	57	.630
Miller J. Huggins	110	44	.714	1957	New York	Casey Stengel	98	56	.636
Miller J. Huggins	101	53	.656	1958*	New York	Casey Stengel	92	62	.597
Connie Mack	104	46	.693	1959	Chicago	Al Lopez	94	60	.610
Connie Mack	102	52	.662						

series winner. † No World Series.

NATIONAL BASEBALL HALL OF FAME

Cooperstown, N. Y.

Member	Elected	Member	Elected	Member	Elected
Over Cleveland	1938	Duffy, Hugh	1945	McGinnity, Joseph Jerome	1946
(Cap)	1939	Evers, John Joseph	1946	McGraw, John Joseph	1937
k (Home Run)	1955	Ewing, William B. (Buck)	1939	Nichols, Charles A. (Kid)	1949
rd Grant	1953	Fox, James Emory	1951	O'Rourke, James H.	1945
es Albert (Chief)	1953	Frisch, Frank F.	1947	Ott, Melvin Thomas	1951
nger Philip	1945	Gehrig, Henry Louis	1939	Pennock, Herbert J.	1948
n	1945	Gehringer, Charles L.	1949	Plank, Edward S.	1946
cai (Three-Finger)	1949	Greenberg, Henry Benjamin	1956	Raddbourne, Charles	1939
gan G.	1937	Griffith, Clark C.	1946	Robinson, Wilbert	1945
C.	1946	Grove, Robert Moses (Lefty)	1947	Ruth, George Herman (Babe)	1936
exander Joy	1938	Hartnett, Charles L. (Gabby)	1955	Schalk, Raymond	1955
ry	1938	Heilmann, Harry E.	1952	Simmons, Aloysius Harry	1953
LeRoy	1946	Hornsby, Rogers	1942	Sisler, George Harold	1939
Dwight	1946	Hubbell, Carl Owen	1947	Spalding, Albert Goodwill	1939
	1945	Jennings, Hughie	1945	Speaker, Tristram E.	1937
aymond	1936	Johnson, Byron Bancroft	1937	Terry, William H.	1954
on (Mickey)	1947	Johnson, Walter Perry	1936	Tinkers, Joseph B.	1946
d Trowbridge	1939	Keeler, Willie	1939	Traynor, Harold J. (Pie)	1948
J.	1945	Kelly, Michael J. (King)	1945	Vance, Arthur C. (Dazzy)	1955
ries Albert	1939	Klem, William Joseph	1953	Waddell, George E. (Rube)	1946
nas H.	1953	Lajoie, Napoleon	1937	Wagner, John P. (Honus)	1936
uel E.	1957	Landis, Kenesaw Mountain	1944	Wallace, Roderick John	1953
Edward	1956	Lyons, Theodore Amar	1955	Walsh, Edward A.	1946
liam Arthur	1939	Mack, Connie	1937	Waner, Paul G.	1952
na (Dizzy)	1953	Maranville, Walter J. (Rabbit)	1954	Wheat, Zachary Davis	1959
ard J.	1945	Mathewson, Christopher	1936	Wright, George	1937
M.	1954	McCarthy, Joseph V.	1957	Wright, Harry	1953
ph Paul	1955	McCarthy, Thomas F.	1946	Young, Denton T. (Cy)	1937

No Additions to Hall of Fame in 1960

the former players eligible for the Baseball Hall of Fame received sufficient votes in 1960. Edd Roush,

with 146 votes, led the balloting. He was 56 votes short of the number required for election.

National League Batting Champions

Year		Avg.	Year		Avg.	Year		Avg.
1876	Roscoe Barnes, Chi.	.404	1904	Honus Wagner, Pitts.	.349	1932	Lefty O'Doul, Bklyn.	
1877	Jim White, Bost.	.385	1905	Cy Seymour, Cin.	.377	1933	Chuck Klein, Phila.	
1878	Abner Dalrymple, Mil.	.356	1906	Honus Wagner, Pitts.	.339	1934	Paul Waner, Pitts.	
1879	Cap Anson, Chi.	.407	1907	Honus Wagner, Pitts.	.350	1935	Arky Vaughan, Pitts.	
1880	George Gore, Chi.	.365	1908	Honus Wagner, Pitts.	.354	1936	Paul Waner, Pitts.	
1881	Cap Anson, Chi.	.399	1909	Honus Wagner, Pitts.	.339	1937	Joe Medwick, St. L.	
1882	Dan Brouthers, Buff.	.367	1910	Sherwood Magee, Phila.	.331	1938	Ernie Lombardi, Cin.	
1883	Dan Brouthers, Buff.	.371	1911	Honus Wagner, Pitts.	.334	1939	John Mize, St. L.	
1884	James O'Rourke, Buff.	.350	1912	Henry Zimmerman, Chi.	.372	1940	Debs Garms, Pitts.	
1885	Roger Connor, N. Y.	.371	1913	Jake Daubert, Bklyn.	.350	1941	Pete Reiser, Bklyn.	
1886	King Kelly, Chi.	.388	1914	Jake Daubert, Bklyn.	.329	1942	Ernie Lombardi, Bost.	
1887	Cap Anson, Chi.	.421	1915	Larry Doyle, N. Y.	.320	1943	Stan Musial, St. L.	
1888	Cap Anson, Chi.	.343	1916	Hal Chase, Cin.	.339	1944	Dixie Walker, Bklyn.	
1889	Dan Brouthers, Bost.	.373	1917	Edd Roush, Cin.	.341	1945	Phil Cavaretta, Chi.	
1890	John Glasscock, N. Y.	.336	1918	Zach Wheat, Bklyn.	.335	1946	Stan Musial, St. L.	
1891	Wm. Hamilton, Phila.	.338	1919	Edd Roush, Cin.	.321	1947	Harry Walker, St. L.-Phil.	
1892	Dan Brouthers, Bklyn., and Clarence Childs, Cleve.	.335	1920	Rogers Hornsby, St. L.	.370	1948	Stan Musial, St. L.	
1893	Hugh Duffy, Bost.	.378	1921	Rogers Hornsby, St. L.	.397	1949	Jackie Robinson, Bklyn.	
1894	Hugh Duffy, Bost.	.438	1922	Rogers Hornsby, St. L.	.401	1950	Stan Musial, St. L.	
1895	Jesse Burkett, Cleve.	.423	1923	Rogers Hornsby, St. L.	.384	1951	Stan Musial, St. L.	
1896	Jesse Burkett, Cleve.	.410	1924	Rogers Hornsby, St. L.	.424	1952	Stan Musial, St. L.	
1897	Willie Keeler, Balt.	.432	1925	Rogers Hornsby, St. L.	.403	1953	Carl Furillo, Bklyn.	
1898	Willie Keeler, Balt.	.379	1926	Gene Hargrave, Cin.	.353	1954	Willie Mays, N. Y.	
1899	Ed Delahanty, Phila.	.408	1927	Paul Waner, Pitts.	.380	1955	Richie Ashburn, Phila.	
1900	Honus Wagner, Pitts.	.381	1928	Rogers Hornsby, Bost.	.387	1956	Henry Aaron, Mil.	
1901	Jesse Burkett, St. L.	.382	1929	Lefty O'Doul, Phila.	.398	1957	Stan Musial, St. L.	
1902	Clarence Beaumont, Pitts.	.357	1930	Bill Terry, N. Y.	.401	1958	Richie Ashburn, Phila.	
1903	Honus Wagner, Pitts.	.355	1931	Chick Hafey, St. L.	.349	1959	Henry Aaron, Mil.	

National League Home Run Champions

Year		No.	Year		No.	Year		No.
1876	George Hall, Phila. Athletics	5	1904	Harry Lumley, Bklyn.	9	1932	Chuck Klein, Phila., and	
1877	George Shaffer, Louisville	3	1905	Fred Odwell, Cin.	9		Mel Ott, N. Y.	
1878	Paul Hines, Providence	4	1906	Tim Jordan, Bklyn.	12	1933	Chuck Klein, Phila.	
1879	Charles Jones, Bost.	9	1907	David Brain, Bost.	10	1934	Mel Ott, N. Y., and	
1880	James O'Rourke, Bost. and		1908	Tim Jordan, Bklyn.	12		Rip Collins, St. L.	
	Harry Stovey, Worcester	6	1909	John Murray, N. Y.	7	1935	Wally Berger, Bost.	
1881	Dan Brouthers, Buffalo	8	1910	Fred Beck, Bost., and		1936	Mel Ott, N. Y.	
1882	George Wood, Det.	7		Frank Schulte, Chi.	10	1937	Mel Ott, N. Y., and	
1883	William Ewing, N. Y.	10	1911	Frank Schulte, Chi.	21		Joe Medwick, St. L.	
1884	Ed Williamson, Chi.	27	1912	Henry Zimmerman, Chi.	14	1938	Mel Ott, N. Y.	
1885	Abner Dalrymple, Chi.	11	1913	Cliff Cravath, Phila.	19	1939	John Mize, St. L.	
1886	Arthur Richardson, Det.	11	1914	Cliff Cravath, Phila.	19	1940	John Mize, St. L.	
1887	Roger Connor, N. Y., and		1915	Cliff Cravath, Phila.	24	1941	Dolph Camilli, Bklyn.	
	Wm. O'Brien, Wash.	17	1916	Davis Robertson, N. Y., and		1942	Mel Ott, N. Y.	
1888	Roger Connor, N. Y.	14		Fred Williams, Chi.	12	1943	Bill Nicholson, Chi.	
1889	Sam Thompson, Phila.	20	1917	Davis Robertson, N. Y., and		1944	Bill Nicholson, Chi.	
1890	Tom Burns, Bklyn., and			Cliff Cravath, Phila.	12	1945	Tommy Holmes, Bost.	
	Mike Tiernan, N. Y.	13	1918	Cliff Cravath, Phila.	8	1946	Ralph Kiner, Pitts.	
1891	Harry Stovey, Bost., and		1919	Cliff Cravath, Phila.	12	1947	Ralph Kiner, Pitts., and	
	Mike Tiernan, N. Y.	16	1920	Cy Williams, Phila.	15		John Mize, N. Y.	
1892	Jim Holliday, Cin.	13	1921	George Kelly, N. Y.	23	1948	Ralph Kiner, Pitts., and	
1893	Ed Delehanty, Phila.	19	1922	Rogers Hornsby, St. L.	42		John Mize, N. Y.	
1894	Hugh Duffy, Bost., and		1923	Cy Williams, Phila.	41	1949	Ralph Kiner, Pitts.	
	Robert Lowe, Bost.	18	1924	Jacques Fournier, Bklyn.	27	1950	Ralph Kiner, Pitts.	
1895	Bill Joyce, Wash.	17	1925	Rogers Hornsby, St. L.	39	1951	Ralph Kiner, Pitts.	
1896	Ed Delehanty, Phila., and		1926	Hack Wilson, Chi.	21	1952	Ralph Kiner, Pitts., and	
	Sam Thompson, Phila.	13	1927	Hack Wilson, Chi., and			Hank Sauer, Chi.	
1897	Nap Lajoie, Phila.	10		Cy Williams, Phila.	30	1953	Ed Mathews, Mil.	
1898	James Collins, Bost.	14	1928	Hack Wilson, Chi., and		1954	Ted Kluszewski, Cin.	
1899	John Freeman, Wash.	25		Jim Bottomley, St. L.	31	1955	Willie Mays, N. Y.	
1900	Herman Long, Bost.	12	1929	Chuck Klein, Phila.	43	1956	Duke Snider, Bklyn.	
1901	Sam Crawford, Cin.	16	1930	Hack Wilson, Chi.	56	1957	Henry Aaron, Mil.	
1902	Tom Leach, Pitts.	6	1931	Chuck Klein, Phila.	31	1958	Ernie Banks, Chi.	
1903	James Sheckard, Bklyn.	9				1959	Ed Mathews, Mil.	

American League Batting Champions

Avg.	Year		Avg.	Year		Avg.
.422	1921	Harry Heilmann, Det.	.394	1941	Ted Williams, Bost.	.406
.376	1922	George Sisler, St. L.	.420	1942	Ted Williams, Bost.	.356
.355	1923	Harry Heilmann, Det.	.403	1943	Luke Appling, Chi.	.328
.381	1924	Babe Ruth, N. Y.	.378	1944	Lou Boudreau, Cleve.	.327
.306	1925	Harry Heilmann, Det.	.393	1945	George Sternweiss, N. Y.	.309
.358	1926	Heinie Manush, Det.	.378	1946	Mickey Vernon, Wash.	.353
.350	1927	Harry Heilmann, Det.	.398	1947	Ted Williams, Bost.	.343
.324	1928	Goose Goslin, Wash.	.379	1948	Ted Williams, Bost.	.369
.377	1929	Lew Fonseca, Cleve.	.369	1949	George Kell, Det.	.343
.385	1930	Al Simmons, Phila.	.381	1950	Billy Goodman, Bost.	.354
.420	1931	Al Simmons, Phila.	.390	1951	Ferris Fain, Phila.	.344
.410	1932	Dale Alexander, Det.-Bost.	.367	1952	Ferris Fain, Phila.	.327
.390	1933	Jimmy Foxx, Phila.	.356	1953	Mickey Vernon, Wash.	.337
.368	1934	Lou Gehrig, N. Y.	.363	1954	Bobby Avila, Cleve.	.341
.369	1935	Buddy Myer, Wash.	.349	1955	Al Kaline, Det.	.340
.386	1936	Luke Appling, Chi.	.388	1956	Mickey Mantle, N. Y.	.353
.383	1937	Charles Gehringer, Det.	.371	1957	Ted Williams, Bost.	.388
.382	1938	Jimmy Foxx, Bost.	.349	1958	Ted Williams, Bost.	.328
.384	1939	Joe DiMaggio, N. Y.	.381	1959	Harvey Kuenn, Det.	.353
.407	1940	Joe DiMaggio, N. Y.	.352			

American League Home Run Champions

No.	Year		No.	Year		No.
13	1921	Babe Ruth, N. Y.	59	1940	Hank Greenberg, Det.	41
16	1922	Ken Williams, St. L.	39	1941	Ted Williams, Bost.	37
13	1923	Babe Ruth, N. Y.	41	1942	Ted Williams, Bost.	36
10	1924	Babe Ruth, N. Y.	46	1943	Rudy York, Det.	34
8	1925	Bob Meusel, N. Y.	33	1944	Nick Etten, N. Y.	22
12	1926	Babe Ruth, N. Y.	47	1945	Vern Stephens, St. L.	24
8	1927	Babe Ruth, N. Y.	60	1946	Hank Greenberg, Det.	44
7	1928	Babe Ruth, N. Y.	54	1947	Ted Williams, Bost.	32
9	1929	Babe Ruth, N. Y.	46	1948	Joe DiMaggio, N. Y.	39
10	1930	Babe Ruth, N. Y.	49	1949	Ted Williams, Bost.	43
9	1931	Babe Ruth, N. Y., and Lou Gehrig, N. Y.	46	1950	Al Rosen, Cleve.	37
10	1932	Jimmy Foxx, Phila.	58	1951	Gus Zernial, Phila.	33
12	1933	Jimmy Foxx, Phila.	48	1952	Larry Doby, Cleve.	32
8	1934	Lou Gehrig, N. Y.	49	1953	Al Rosen, Cleve.	43
7	1935	Jimmy Foxx, Phila., and Hank Greenberg, Det.	36	1954	Larry Doby, Cleve.	32
12	1936	Lou Gehrig, N. Y.	49	1955	Mickey Mantle, N. Y.	37
9	1937	Joe DiMaggio, N. Y.	46	1956	Mickey Mantle, N. Y.	52
11	1938	Hank Greenberg, Det.	58	1957	Roy Sievers, Wash.	42
29	1939	Jimmy Foxx, Phila.	35	1958	Mickey Mantle, N. Y.	42
54	1940			1959	Rocky Colavito, Cleve., and Harmon Killebrew, Wash.	42

BABE RUTH'S MAJOR LEAGUE HOME RUN RECORD

Year	Season	No.	Year	Season	No.	Year	Season	No.
1923	New York (A)	41	1934	New York (A)	22	1927	New York (A)	2
1924	New York (A)	46	1935	Boston (N)	6	1928	New York (A)	3
1925	New York (A)	25	World Series			1932	New York (A)	2
1926	New York (A)	47				All-Star Game		
1927	New York (A)	60						
1928	New York (A)	54	Year	Club	No.	Year	Club	No.
1929	New York (A)	46	1915	Boston (A)	0	1933	American	1
1930	New York (A)	49	1916	Boston (A)	0	1934	American	0
1931	New York (A)	46	1918	Boston (A)	0	Totals		
1932	New York (A)	46	1921	New York (A)	1			
1933	New York (A)	41	1922	New York (A)	0	Regular season		714
1934	New York (A)	34	1923	New York (A)	3	World Series		15
			1926	New York (A)	4	All-Star		1

MAJOR LEAGUE ATTENDANCE RECORDS

—78,672, San Francisco at Los Angeles (N. L.), 1938.
 —84,587, New York at Cleveland (A. L.), Sept. 1940.
 —100,000, Chicago at Cleveland (A. L.), Aug. 20, 1948.
 —2,620,627, Cleveland (A. L.), 1948.

Season, road—1,871,545, New York (A. L.), 1949.
 Season, league—11,150,099, American League, 1948.
 World Series, single game—92,706, Chicago (A. L.) at Los Angeles (N. L.), Oct. 6, 1959.
 World Series, all games (6)—420,784, Chicago (A. L.) and Los Angeles (N. L.), 1959.

Major League Individual All-Time Records

Highest Batting Average—438, Hugh Duffy, Boston N. L., 1894. (Since 1900—424, Rogers Hornsby, St. Louis N. L., 1924).
 Most Years Led League in Batting—12, Ty Cobb, Detroit A. L., 1907-15, 1917-19.
 Most Years Batted .300 or Better—23, Ty Cobb, Detroit A. L., 1906-26, Philadelphia A. L., 1927-28.
 Most hits—4,191, Ty Cobb, Detroit A. L., 1905-26, Philadelphia, 1927-28.
 Most Hits, Season—257, George Sisler, St. Louis A. L., 1920.
 Most Hits, Game (9 innings)—7, Wilbert Robinson, Baltimore N. L., 6 singles, 1 double, 1892. (Since 1900—6, by many.)
 Most Hits, Game (extra innings)—9, John Burnett, Cleveland A. L., 18 innings, 7 singles, 2 doubles, 1932.
 Most Hits in Succession—12, Mike Higgins, Boston A. L., in four games, 1938; Walt Dropo, Detroit A. L., in three games, 1952.
 Most Consecutive Games Batted Safely—56, Joe DiMaggio, New York A. L., 1941.
 Most Runs—2,244, Ty Cobb, Detroit A. L., 1905-26, Philadelphia 1927-28.
 Most Runs, Season—196, William Hamilton, Philadelphia N. L., 1894. (Since 1900—177, Babe Ruth, New York A. L., 1921).
 Most Runs, Game—7, Guy Hecker, Louisville A. A., 1886. (Since 1900—6, by many.)
 Most Runs Batted In—2,209, Babe Ruth, Boston A. L., 1914-19, New York A. L., 1920-34, Boston N. L., 1935.
 Most Runs Batted In, Season—190, Hack Wilson, Chicago N. L., 1930.
 Most Runs Batted In, Game—12, Jim Bottomley, St. Louis N. L., 1924.
 Most Home Runs—714, Babe Ruth, Boston A. L., 1915-19, New York A. L., 1920-34, Boston N. L., 1935.
 Most Home Runs, Season—60, Babe Ruth, New York A. L., 1927.
 Most Home Runs, Game—4, Robert Lowe, Boston N. L.,

1894; Ed Delahanty, Philadelphia N. L., 1896; Lou New York A. L., 1932; Chuck Klein, Philadelphia 1936; Pat Seerey, Chicago A. L., 1948; Gil Hodges, B N. L., 1950; Joe Adcock, Milwaukee N. L., 1954. Colavito, Cleveland A. L., 1959.
 Most Home Runs with Bases Filled—23, Lou Gehrig, New York A. L., 1927-38.
 Most 2-Base Hits—793, Tris Speaker, Boston A. L., 1907-19, Cleveland A. L., 1916-26, Washington A. L., 1927-31, Philadelphia A. L., 1928.
 Most 2-Base Hits, Season—67, Earl Webb, Boston A. L., 1914.
 Most 2-Base Hits, Game—4, by many.
 Most 3-Base Hits—312, Sam Crawford, Cincinnati A. L., 1899-1902, Detroit A. L., 1903-17.
 Most 3-Base Hits, Season—36, Owen Wilson, Philadelphia A. L., 1912.
 Most 3-Base Hits, Game—4, George Strief, Philadelphia 1885; William Joyce, New York N. L., 1897. (Since 1900—by many.)
 Most Games Played—3,033, Ty Cobb, Detroit A. L., 1905-35, Philadelphia A. L., 1927-28.
 Most Consecutive Games Played—2,130, Lou Gehrig, New York A. L., 1925-39.
 Most Bases on Balls—2,056, Babe Ruth, Boston A. L., 1915-19, New York A. L., 1920-34, Boston N. L., 1935.
 Most Bases on Balls, Season—170, Babe Ruth, New York A. L., 1923.
 Most Bases on Balls, Game—4, Walter Wilton, New York N. L., 1891; Jimmy Foxx, Boston A. L., 1938.
 Most Strikeouts—1,330, Babe Ruth, Boston A. L., 1915-19, New York A. L., 1920-34, Boston N. L., 1935.
 Most Strikeouts, Season—138, Jim Lemon, Washington A. L., 1956.
 Most Strikeouts, Game (9 innings)—5, by many.
 Most Strikeouts, Game (extra innings)—6, Carl Hubbell, St. Louis A. L., 15 innings, 1913; Don Hoak, Chicago A. L., 17 innings, 1956.
 Fewest Strikeouts, Season (150 or more games)—1, Sewell, Cleveland A. L., 1925 and 1929.

PITCHING

Most Games Won—511, Cy Young, Cleveland N. L., 1890-98, St. Louis N. L., 1899-1900, Boston A. L., 1901-08, Cleveland A. L., 1909-11, Boston N. L., 1911.
 Most Games Won, Season—60, Charles Radbourne, Providence N. L., 1884. (Since 1900—41, Jack Chesbro, New York A. L., 1904.)
 Most Consecutive Games Won—24, Carl Hubbell, New York N. L., 1936 (16) and 1937 (8).
 Most Consecutive Games Won, Season—19, Timothy Lincecum, New York N. L., 1888; Rube Marquard, New York N. L., 1912.
 Most Years Won 20 or More Games—16, Cy Young, Cleveland N. L., 1891-98, St. Louis N. L., 1899-1900, Boston A. L., 1901-04, 1907-08.
 Most Shutouts—113, Walter Johnson, Washington A. L., 1907-27.
 Most shutouts, season—16, Grover Alexander, Philadelphia N. L., 1916.
 Most Consecutive Shutouts—5, Harris White, Chicago A. L., 1904.

Most Consecutive Scoreless Innings—56, Walter Johnson, Washington A. L., 1913.
 Most Strikeouts—3,497, Walter Johnson, Washington A. L., 1907-27.
 Most Strikeouts, Season—505, Matthew Kilroy, Boston A. A., 1886. (Since 1900—348, Bob Feller, Cleveland A. L., 1946.)
 Most Strikeouts, Game—19, Charles Sweeney, Philadelphia A. L., 1884. (Since 1900—18, Bob Feller, Cleveland A. L., 1938; Sandy Koufax, Los Angeles N. L., 1959.)
 Most Consecutive Strikeouts—9, Michael Welch, New York N. L., 1884. (Since 1900—8, Max Surkont, Milwaukee A. L., 1953.)
 Most Games Season—75, William White, Cincinnati A. L., 1879. (Since 1900—74, Jim Konstanty, Philadelphia A. L., 1950.)
 Most Complete Games, Season—74, William White, Cincinnati A. L., 1879. (Since 1900—48, Jack Chesbro, New York A. L., 1904.)

LIFETIME WORLD

Most hits—68, Yogi Berra, New York A. L., 1947, 1949-53, 1955-58, 1960.
 Most runs—39, Yogi Berra, New York A. L., 1947, 1949-53, 1955-58, 1960.
 Most runs batted in—36, Yogi Berra, New York A. L., 1947, 1949-53, 1955-58, 1960.
 Most home runs—15, Babe Ruth, Boston A. L., 1915-16, 1918, New York A. L., 1921-23, 1926-28, 1932.

SERIES RECORDS

Most bases on balls—33, Babe Ruth, Boston A. L., 1918, New York A. L., 1921-23, 1926-28, 1932.
 Most strikeouts—33, Duke Snider, Brooklyn N. L., 1952-53, 1955-56, 1959; Mickey Mantle, New York A. L., 1947, 1949-53, 1955-58, 1960.
 Most times, member of winning team—9, Joe Judge, New York A. L., 1936-39, 1941, 1947, 1949-51.

MAJOR LEAGUE ALL-STAR GAME

A.L.—American League, N.L.—National League.

Winning league and manager	Runs	Losing league and manager	Runs	Winning pitcher	Losing pitcher	Site	Paid attendance
6 A.L. (Mack).....	4	N.L. (McGraw)....	2	Gomez	Hallahan	Chicago A.L.	49,200
10 A.L. (Cronin).....	9	N.L. (Terry).....	7	Harder	Mungo	New York N.L.	48,363
8 A.L. (Cochrane)....	4	N.L. (Frisch).....	1	Gomez	Walker	Cleveland A.L.	69,812
7 N.L. (Grimm).....	4	A.L. (McCarthy)....	3	J. Dean	Grove	Boston N.L.	25,534
7 A.L. (McCarthy)....	8	N.L. (Terry).....	3	Gomez	J. Dean	Washington A.L.	31,391
6 N.L. (Terry).....	4	A.L. (McCarthy)....	1	Vander Meer	Gomez	Cincinnati N.L.	27,607
1 A.L. (McCarthy)....	3	N.L. (Hartnett)....	1	Bridges	Lee	New York A.L.	62,892
9 N.L. (McKechnie)....	4	A.L. (Cronin).....	0	Derringer	Ruffing	St. Louis N.L.	32,373
8 A.L. (Baker).....	7	N.L. (McKechnie)....	5	E. Smith	Passeau	Detroit A.L.	54,674
6 A.L. (McCarthy)....	3	N.L. (Durocher)....	1	Chandler	Cooper	New York N.L.	33,694
* A.L. (McCarthy)....	5	N.L. (Southworth)...	3	Leonard	Cooper	Philadelphia A.L.	31,938
1* N.L. (Southworth)...	7	A.L. (McCarthy)....	1	Raffensberger	Hughson	Pittsburgh N.L.	29,589
9 A.L. (O'Neill).....	12	N.L. (Grimm).....	0	Feller	Passeau	Boston A.L.	34,906
8 A.L. (Cronin).....	2	N.L. (Dyer).....	1	Shea	Sain	Chicago N.L.	41,123
3 A.L. (Harris).....	5	N.L. (Durocher)....	2	Raschi	Schmitz	St. Louis A.L.	34,009
2 A.L. (Boudreau)....	11	N.L. (Southworth)...	7	Trucks	Newcombe	Brooklyn N.L.	32,577
1 N.L. (Shotton)....	4	A.L. (Stengel).....	3a	Blackwell	Gray	Chicago A.L.	46,127
0 N.L. (Sawyer).....	8	A.L. (Stengel).....	3	Maglie	Lopat	Detroit A.L.	52,075
8 N.L. (Durocher)....	3	A.L. (Stengel).....	2b	Rush	Lemon	Philadelphia N.L.	32,785
4 N.L. (Dressen)....	5	A.L. (Stengel).....	1	Spahn	Reynolds	Cincinnati N.L.	30,846
3 A.L. (Stengel).....	11	N.L. (Alston).....	9	Stone	Conley	Cleveland A.L.	68,751
2 N.L. (Durocher)....	6	A.L. (Lopez).....	5c	Conley	Sullivan	Milwaukee N.L.	45,314
0 N.L. (Alston).....	7	A.L. (Stengel).....	3	Friend	Pierce	Washington A.L.	28,843
9 A.L. (Stengel).....	6	N.L. (Alston).....	5	Bunning	Simmons	St. Louis N.L.	30,693
8 A.L. (Stengel).....	4	N.L. (Haney).....	3	Wynn	Friend	Baltimore A.L.	48,829
7 N.L. (Haney).....	5	A.L. (Stengel).....	4	Antonelli	Ford	Pittsburgh N.L.	35,277
3 A.L. (Stengel).....	6	N.L. (Haney).....	3	Walker	Drysdale	Los Angeles N.L.	54,982

ame. † Two games in 1959. aFourteen innings. bFive innings, rain. cTwelve innings.

JUNIOR WORLD SERIES

International League vs. American Association

No series 1905, 1908-16, 1918-19, 1935.

Games				Year	Winner	Games		
W	L	Loser	W			L	Loser	
inner	2	1	St. Paul	1939	Louisville (AA)	4	3	Rochester
o (IL)	2	1	St. Paul	1939	Louisville (AA)	4	3	Rochester
o (IL)	3	2	Columbus	1940	Newark (IL)	4	2	Louisville
o (IL)	4	1	Columbus	1941	Columbus (AA)	4	2	Montreal
apolis (AA)	4	1	Toronto	1942	Columbus (AA)	4	1	Syracuse
ore (IL)	5	1	St. Paul	1943	Columbus (AA)	4	1	Syracuse
ille (AA)	5	3	Baltimore	1944	Baltimore (IL)	4	2	Louisville
ore (IL)	5	2	St. Paul	1945	Louisville (AA)	4	2	Newark
s City (AA)	5	4	Baltimore	1946	Montreal (IL)	4	2	Louisville
ul (AA)	5	4	Baltimore	1947	Milwaukee (AA)	4	3	Syracuse
ore (IL)	5	3	Louisville	1948	Montreal (IL)	4	1	St. Paul
(IL)	5	0	Louisville	1949	Indianapolis (AA)	4	2	Montreal
(AA)	5	1	Buffalo	1950	Columbus (AA)	4	1	Baltimore
apolis (AA)	5	1	Rochester	1951	Milwaukee (AA)	4	2	Montreal
s City (AA)	5	4	Rochester	1952	Rochester (IL)	4	3	Kansas City
ter (IL)	5	3	Louisville	1953	Montreal (IL)	4	1	Kansas City
ter (IL)	5	3	St. Paul	1954	Louisville (AA)	4	2	Syracuse
k (IL)	4	2	Minneapolis	1955	Minneapolis (AA)	4	3	Rochester
us (AA)	5	3	Buffalo	1956	Indianapolis (AA)	4	0	Rochester
us (AA)	5	4	Toronto	1957	Denver (AA)	4	1	Buffalo
kee (AA)	4	1	Buffalo	1958	Minneapolis (AA)	4	0	Montreal
(IL)	4	3	Columbus	1959	Havana (IL)	4	3	Minneapolis
City (AA)	4	3	Newark					
e game.								

e game.

MAJOR LEAGUE FRANCHISE SHIFTS

Braves (N. L.) became Milwaukee Braves.
 dance, last season in Boston (1952), 281,278;
 in Milwaukee (1953), 1,826,397.
 is Browns (A. L.) became Baltimore Orioles.
 dance, last season in St. Louis (1953), 297,238;
 in Baltimore (1954), 1,060,910.
 Philadelphia Athletics (A. L.) became Kansas City
 Home attendance, last season in Philadelphia

(1954), 627,100; first season in Kansas City (1955),
 1,393,054.

1958—New York Giants (N. L.) became San Francisco Giants.
 Home attendance, last season in New York (1957), 653,923;
 first season in San Francisco (1958), 1,272,625.

1958—Brooklyn Dodgers (N. L.) became Los Angeles Dodgers.
 Home attendance, last season in Brooklyn (1957), 1,028,258;
 first season in Los Angeles (1958), 1,845,556.

Larsen's Perfect Game in '56 World Series

Don Larsen of the New York Yankees pitched the first no-run no-hit game in World Series history in 1956 and hurled a perfect game in so doing. Facing the Brooklyn Dodgers at the Yankee Stadium

in the fifth game of the series on Oct. 3, 1956, Larsen retired 27 batters in a row. The righthander made only 97 pitches. The Yankees won, 2 to 0. The attendance was 64,519. The box score:

BROOKLYN (N)							NEW YORK (A)						
	ab	r	h	po	a	e		ab	r	h	po	a	e
Gilliam, 2b.....	3	0	0	2	0	0	Bauer, rf.....	4	0	1	4	0	0
Reese, ss.....	3	0	0	4	2	0	Collins, 1b.....	4	0	1	7	0	0
Snider, cf.....	3	0	0	1	0	0	Mantle, cf.....	3	1	1	4	0	0
Robinson, 3b.....	3	0	0	2	4	0	Berra, c.....	3	0	0	7	0	0
Hodges, 1b.....	3	0	0	5	1	0	Slaughter, lf.....	2	0	0	1	0	0
Amoros, lf.....	3	0	0	3	0	0	Martin, 2b.....	3	0	1	3	0	0
Furillo, rf.....	3	0	0	0	0	0	McDougald, ss.....	2	0	0	0	0	0
Campanella, c.....	3	0	0	7	2	0	Carey, 3b.....	3	1	1	1	0	0
Maglie, p.....	2	0	0	0	1	0	Larsen, p.....	2	0	0	0	0	0
aMitchell.....	1	0	0	0	0	0							
Totals.....	27	0	0	24	10	0	Totals.....	26	2	5	27	0	0

aCalled out on strikes for Maglie in 9th.

Brooklyn..... 0 0 0 0 0 0 0 0 0 0 — 0

New York..... 0 0 0 1 0 1 0 0 x — 2

Runs batted in—Mantle, Bauer. Home run—Mantle. Sacrifice—Larsen. Double plays—Reese and Hodges; Hodges and Robinson, Campanella and Robinson. Left on bases—Brooklyn 0, New York 3. Bases on balls—Off Maglie 2 (Snider, Robinson, Campanella). Struck out—By Larsen 7 (Gilliam, Reese, Hodges, Campanella, Snider, Gilliam, Mitchell), Maglie 5 (Collins 2, Larsen, Bauer). Runs and earned runs—Off Larsen 0-0, Maglie 2-2. Umpires—Pinelli (N), plate; Soar (A), first base; Bogges (N), second base; Napp (A), third base; Gorman (N), left field; Runge (A), right field. Time of game—2:06.

National Baseball Congress Champions

(Non-Pro)

1935 Bismarck (N. D.) Corwin-Churchill	1944 Sherman Field (Kans.) Flyers	1953 Fort Leonard Wood (Mo.)
1936 Duncan (Okla.) Halliburtons	1945 Enid (Okla.) Army Air Field	pers
1937 Enid (Okla.) Eason Oilers	1946 St. Joseph (Mich.) Auscos	1954 Wichita (Kan.) Boeing Bo
1938 Buford (Ga.) Bona Allens	1947 Ft. Wayne (Ind.) General Electrics	1955 Wichita (Kan.) Boeing Bo
1939 Duncan (Okla.) Halliburtons	1948 Ft. Wayne (Ind.) General Electrics	1956 Ft. Wayne (Ind.) Dairyme
1940 Enid (Okla.) Champlins	1949 Ft. Wayne (Ind.) General Electrics	1957 Sinton (Tex.) Plymouth O
1941 Enid (Okla.) Champlins	1950 Ft. Wayne (Ind.) Capeharts	1958 Drain (Ore.) Black Sox
1942 Wichita (Kan.) Boeing Bombers	1951 Sinton (Tex.) Plymouth Oilers	1959 Houston (Tex.) Fed-Marts
1943 Camp Wheeler (Ga.) Spokes	1952 Fort Meyer (Va.) Colonials	

American Legion Junior Champions

1926 Cook Post, Yonkers, N. Y.	1942 Sunrise Post, Los Angeles
1927 No tournament	1943 Richfield Post, Minneapolis
1928 Oakland (Calif.) Post	1944 Bentley Post, Cincinnati
1929 South Buffalo Post, Buffalo, N. Y.	1945 Hoyle Post, Shelby, N. C.
1930 Baltimore & Ohio Railroad Post, Baltimore	1946 Crescent City Post, New Orleans
1931 South Side Post, So. Chicago, Ill.	1947 Bentley Post, Cincinnati
1932 Callender Post, New Orleans	1948 Trenton (N. J.) Post
1933 National Post, Chicago	1949-50 Erwin Post, Oakland, Calif.
1934 Fort Cumberland Post, Cumberland, Md.	1951 Crenshaw Post, Los Angeles
1935 Gaston Post, Gastonia, N. C.	1952 Bentley Post, Cincinnati
1936 Spartanburg (S. C.) Post	1953 Wheeler Post, Yakima, Wash.
1937 East Lynn (Mass.) Post	1954 Downtown Post, San Diego, Calif.
1938 San Diego (Calif.) Post	1955 Postal Employees Post, Cincinnati
1939 Omaha (Neb.) Post	1956 Stockholm Post, St. Louis
1940 Hill Post, Albemarle, N. C.	1957-58 Bentley Post, Cincinnati
1941 San Diego (Calif.) Post	1959 Edison Post, Detroit

Longest Game in the Majors

A 26-inning tie between the Brooklyn Dodgers and the Boston Braves of the National League on May 1, 1920, was the longest game in major league history. Played at Braves Field, Boston, the game was called because of darkness with the score 1-1. Brooklyn scored its run in the

fourth inning and Boston matched in the fifth. Both starting pitchers, Cadore of Brooklyn and Joe Oeschger of Boston, were still in the game at the end, 3 hours and 15 minutes after it had begun. Cadore allowed 15 hits, Oeschger 9. Cadore struck out 10, Oeschger 7. Cadore walked 5; Oeschger fanned 7, walked 7.

FAMOUS BASEBALL NICKNAMES

Given name(s)	Surname	Nickname	Given name(s)	Surname
Charles Benjamin	Adams	Hans	John Bernard	Robert
Walter Emmons	Alston	Whitey	Carroll Walter	Lockman
Adrian Constantine	Anson	Schnozz	Ernesto Natali	Lombardi
John Franklin	Baker	Heinie	Henry Emmett	Manush
David Russell	Bell	The Barber	Salvatore Anthony	Maglie
Charles Albert	Bender	Rabbit	Walter James	Maranville
Lawrence Peter	Berra	Slats	Martin Whiteford	Marion
Mordecai Peter	Brown	Rube	Richard William	Marquard
Forrest Harrill	Burgess	Billy	Alfred Manuel	Martin
Owen Joseph	Bush	Pepper	John Leonard	Martin
Alfonso	Carrasquel	Big Six	Christopher	Mathewson
Gordon Stanley	Cochrane	Iron Man	Joseph Jerome	McGinnity
Roger Maxwell	Cramer	Ducky	Joseph Michael	Medwick
Samuel Earl	Crawford	Irish	Emil Frederick	Meusel
Hazen Shirley	Cuyler	Bing	Edmund John	Miller
Jay Hanna	Dean	Minnie	Saturnino Orestes	Minoso
Paul Dee	Dean	The Man	Stanley Frank	Musial
Joseph Paul	DiMaggio	Bobo	Louis Norman	Newsom
Leo Ernest	Durocher	Lefty	Frank Joseph	O'Doul
William Buckingham	Ewing	Pee Wee	Harold Henry	Reese
Edward Charles	Ford	Muddy	Herold Dominic	Ruel
Jacob Nelson	Fox	Red	Charles Herbert	Ruffing
James	Gilliam	Babe	George Herman	Ruth
Vernon	Gomez	Red	Albert Fred	Schoendienst
Joseph Lowell	Gordon	Twinkletoes	George Alexander	Selkirk
Leon Allen	Goslin	Country	Enos Bradsher	Slaughter
Henry Knight	Groh	Duke	Edwin Donald	Snider
Robert Moses	Grove	Casey	Charles Dillon	Stengel
George William	Haas	Birdie	George Robert	Tebbetts
Irving Darius	Hadley	Pie	Harold Joseph	Traynor
Charles James	Hafey	Dazzy	Arthur Charles	Vance
Eugene Franklin	Hargrave	Arky	Joseph Floyd	Vaughan
Stanley Raymond	Harris	Mickey	James Barton	Vernon
Charles Leo	Hartnett	Rube	George Edward	Waddell
Floyd Caves	Herman	Honus	John Peter	Wagner
Michael Franklin	Higgins	Rube	George Francis	Walberg
Rogers	Hornsby	Dixie	Frederick E.	Walker
Travis Calvin	Jackson	Bucky	William Henry	Walters
William C.	Jacobson	Little Poison	Lloyd James	Waner
Willie Edward	Jones	Big Poison	Paul Glee	Waner
George Lange	Kelly	Cy	Frederick	Williams
Ralph	Kress	Splendid Splinter	Theodore Samuel	Williams
Harry Arthur	Lavagetto	Hack	Lewis Robert	Wilson
Emil John	Leonard	Cy	Denton True	Young

SOFTBALL

Source: Amateur Softball Association.

World Amateur Champions

MEN	Year	Team
Gillis, Chicago	1958	Raybestos Cardinals, Stratford, Conn.
Wash-A's, Kenosha, Wis.	1959	Sealmasters, Aurora, Ill.
son Coaches, Toledo, Ohio		
ak Park, Rochester, N. Y.		
gs Mfg. Co., Detroit		
ers, Cincinnati		
s, Covington, Ky.		
ak Park, Rochester, N. Y.		
ix Brakes, South Bend, Ind.		
Rock Oilers, Tulsa, Okla.		
mer Field, Fresno, Calif.		
ers, Ft. Wayne, Ind.		
gs Beautyware, Detroit		
op Tailors, Toronto, Ont.		
water (Fla.) Bombers		
Chemical Co., Midland, Mich.		
gs Beautyware, Detroit		
water (Fla.) Bombers		
estros Cardinals, Stratford, Conn.		
water (Fla.) Bombers		

WOMEN

Year	Team
1933	Great Northerns, Chicago
1934	Hart Motors, Chicago
1935	Bloomer Girls, Cleveland
1936-37	National Mfg. Co., Cleveland
1938-39	J. J. Kreig's, Alameda, Calif.
1940	Arizona Ramblers, Phoenix, Ariz.
1941	Higgins, Midgets, Tulsa, Okla.
1942-43	Jax Maids, New Orleans
1944	Lind & Pomeroy, Portland, Ore.
1945-47	Jax Maids, New Orleans
1948-49	Arizona Ramblers, Phoenix
1950-52	Orange (Calif.) Lionettes
1953	Betsy Ross Rockets, Fresno, Calif.
1954	Leach Motors Rockets, Fresno, Calif.
1955-56	Orange (Calif.) Lionettes
1957	Hacienda Rockets, Fresno, Calif.
1958-59	Raybestos Brackettes, Stratford, Conn.

FOOTBALL

THE PASTIME of kicking a ball around goes back beyond the limits of recorded history. Ancient savage tribes played football of a primitive kind. There was a ball-kicking game played by Athenians and Spartans and Corinthians 2500 years ago and the Greeks had a name for it: *Episkuros*. The Romans had a somewhat similar game called *Harpastum* and are supposed to have carried the game with them when they invaded the British Isles in the First Century, B.C.

Undoubtedly the game known in the United States as Football traces directly to the English game of Rugby, though the modifications have been many and rather sweeping in some directions. There was informal football on our college lawns well over a century ago and an annual Freshman-Sophomore series of "scrimmages" began at Yale in 1840. But the first formal intercollegiate football game in this country was the Princeton-Rutgers contest at New Brunswick, N. J., on Nov. 6, 1869, with Rutgers winning by 6 goals to 4.

In those old days games were played with twenty-five, twenty, fifteen or eleven men on a side by mutual agreement. In 1880 there was a football convention at which Walter Camp of Yale persuaded the

delegates to agree to a rule calling eleven players on a side. In 1882 the adopted the rule requiring the off team to make 5 yards in three downs. The surrender the ball to its opponents. The game grew so rough that it was at as brutal by many critics and some colleges abandoned the sport. Conditions so bad in 1906 that President Theodore Roosevelt, an enthusiast for all sports, called a meeting of Yale, Harvard, Princeton representatives at the White House in the hope of reforming and improving the game. The outcome was the game, with the forward pass introduced and some other modifications. Rules inserted, became faster and cleaner and gradually grew to the tremendous popularity it enjoys today.

Professional football, now firmly established, is an outgrowth of intercollegiate football. The first professional game played in 1895 at Latrobe, Pa. The National Football League was founded in 1920. The All-America Conference went into operation in 1946. At the end of the 1949 season two major play-for-pay circuits were established, retaining the name of the older leagues. In 1960, a rival circuit, the American Football League, began operations.

Famous Series Records

Army-Navy

	A	N		A	N		A	N		A	N		A	N		A	N
1880	0	24	1905	6	6	1916	15	7	1930	6	0	1940	0	14	1950		
1891	32	16	1906	0	10	1919	0	6	1931	17	7	1941	6	14	1951		
1892	4	12	1907	0	6	1920	0	7	1932	20	0	1942	0	14	1952		
1893	4	6	1908	6	4	1921	0	7	1933	12	7	1943	0	13	1953		
1899	17	5	1910	0	3	1922	17	14	1934	0	3	1944	23	7	1954		
1900	7	11	1911	0	3	1923	0	0	1935	28	6	1945	32	13	1955		
1901	11	5	1912	0	6	1924	12	0	1936	0	7	1946	21	18	1956		
1902	22	8	1913	22	9	1925	10	3	1937	6	0	1947	21	0	1957		
1903	40	5	1914	20	0	1926	21	21	1938	14	7	1948	21	21	1958		
1904	11	0	1915	14	0	1927	14	9	1939	0	10	1949	38	0	1959		

Army-Notre Dame

	A	ND		A	ND		A	ND		A	ND		A	ND		A	ND
1913	13	35	1920	17	27	1926	0	7	1932	0	21	1938	7	19	1944		
1914	20	7	1921	0	28	1927	18	0	1933	12	13	1939	0	14	1945		
1915	0	7	1922	0	0	1928	6	12	1934	6	12	1940	0	7	1946		
1916	30	10	1923	0	13	1929	0	7	1935	6	6	1941	0	0	1947		
1917	2	7	1924	7	13	1930	6	7	1936	6	20	1942	0	13	1957		
1919	9	12	1925	27	0	1931	12	0	1937	0	7	1943	0	26	1958		

Harvard-Yale

	H	Y		H	Y		H	Y		H	Y		H	Y		H	Y
1875	4g	0g	1891	0	10	1906	0	6	1921	10	3	1934	0	14	1949		
1876	0g	1g	1892	0	6	1907	0	12	1922	10	3	1935	7	14	1950		
1878	0g	1g	1893	0	6	1908	4	0	1923	0	13	1936	13	14	1951		
1879	0g	0g	1894	4	12	1909	0	8	1924	6	19	1937	13	6	1952		
1880	0g	1g	1897	0	0	1910	0	0	1925	0	0	1938	7	0	1953		
1881	0g	0g	1898	17	0	1911	0	0	1926	7	12	1939	7	20	1954		
1882	0g	1g	1899	0	0	1912	20	0	1927	0	14	1940	28	0	1955		
1883	2	23	1900	0	28	1913	15	5	1928	17	0	1941	14	0	1956		
1884	0	52	1901	22	0	1914	36	0	1929	10	6	1942	3	7	1957		
1886	4	29	1902	0	23	1915	41	0	1930	13	0	1945	0	28	1958		
1887	8	17	1903	0	16	1916	3	6	1931	0	3	1946	14	27	1959		
1889	0	6	1904	0	12	1919	10	3	1932	0	19	1947	21	31			
1890	12	6	1905	0	6	1920	9	0	1933	19	6	1948	20	7			

RECORD OF ANNUAL POSTSEASON FOOTBALL GAMES

Rose Bowl (Pasadena, Calif.)

1902	Michigan 49, Stanford 0
1916	Washington State 14, Brown 0
1917	Oregon 14, Pennsylvania 0
1918	Mare Island Marines 19, Camp Lewis 7
1919	Great Lakes 17, Mare Island Marines 0
1920	Harvard 7, Oregon 6
1921	California 28, Ohio State 0
1922	Washington & Jefferson 0, California 0
1923	Southern California 14, Penn State 3
1924	Navy 14, Washington 14
1925	Notre Dame 27, Stanford 10
1926	Alabama 20, Washington 19
1927	Alabama 7, Stanford 7
1928	Stanford 7, Pittsburgh 6
1929	Georgia Tech 8, California 7
1930	Southern California 47, Pittsburgh 14
1931	Alabama 24, Washington State 0
1932	Southern California 21, Tulane 12
1933	Southern California 35, Pittsburgh 0
1934	Columbia 7, Stanford 0
1935	Alabama 29, Stanford 13
1936	Stanford 7, Southern Methodist 0
1937	Pittsburgh 21, Washington 0
1938	California 13, Alabama 0
1939	Southern California 7, Duke 3
1940	Southern California 14, Tennessee 0
1941	Stanford 21, Nebraska 13
1942	Oregon State 20, Duke 16*
1943	Georgia 9, U. C. L. A. 0
1944	Southern California 29, Washington 0
1945	Southern California 25, Tennessee 0
1946	Alabama 34, Southern California 14
1947	Illinois 45, U. C. L. A. 14
1948	Michigan 49, Southern California 0
1949	Northwestern 20, California 14
1950	Ohio State 17, California 14
1951	Michigan 14, California 6
1952	Illinois 40, Stanford 7
1953	Southern California 7, Wisconsin 0
1954	Michigan State 28, U. C. L. A. 20
1955	Ohio State 20, Southern California 7
1956	Michigan State 17, U. C. L. A. 14
1957	Iowa 35, Oregon State 19
1958	Ohio State 10, Oregon 7
1959	Iowa 38, California 12
1960	Washington 44, Wisconsin 8

* Played at Durham, N. C.

Cotton Bowl (Dallas, Tex.)

1937	Texas Christian 16, Marquette 6
1938	Rice 28, Colorado 14
1939	St. Mary's (Calif.) 20, Texas Tech 13
1940	Clemson 6, Boston College 3
1941	Texas A & M 13, Fordham 12
1942	Alabama 29, Texas A & M 21
1943	Texas 14, Georgia Tech 7
1944	Randolph Field 7, Texas 7
1945	Oklahoma A & M 34, Texas Christian 0
1946	Texas 40, Missouri 27
1947	Louisiana State 0, Arkansas 0
1948	Southern Methodist 13, Penn State 13
1949	Southern Methodist 21, Oregon 13
1950	Rice 27, North Carolina 13
1951	Tennessee 20, Texas 14
1952	Kentucky 20, Texas Christian 7
1953	Texas 16, Tennessee 0
1954	Rice 28, Alabama 6
1955	Georgia Tech 14, Arkansas 6
1956	Mississippi 14, Texas Christian 13

1957	Texas Christian 28, Syracuse 27
1958	Navy 20, Rice 7
1959	Air Force 0, Texas Christian 0
1960	Syracuse 23, Texas 14

Sugar Bowl (New Orleans, La.)

1935	Tulane 20, Temple 14
1936	Texas Christian 3, Louisiana State 2
1937	Santa Clara 21, Louisiana State 14
1938	Santa Clara 6, Louisiana State 0
1939	Texas Christian 15, Carnegie Tech 7
1940	Texas A & M 14, Tulane 13
1941	Boston College 19, Tennessee 13
1942	Fordham 2, Missouri 0
1943	Tennessee 14, Tulsa 7
1944	Georgia Tech 20, Tulsa 18
1945	Duke 29, Alabama 26
1946	Oklahoma A & M 33, St. Mary's (Calif.) 13
1947	Georgia 20, North Carolina 10
1948	Texas 27, Alabama 7
1949	Oklahoma 14, North Carolina 6
1950	Oklahoma 35, Louisiana State 0
1951	Kentucky 13, Oklahoma 7
1952	Maryland 28, Tennessee 13
1953	Georgia Tech 24, Mississippi 7
1954	Georgia Tech 42, West Virginia 19
1955	Navy 21, Mississippi 0
1956	Georgia Tech 7, Pittsburgh 0
1957	Baylor 13, Tennessee 7
1958	Mississippi 39, Texas 7
1959	Louisiana State 7, Clemson 0
1960	Mississippi 21, Louisiana State 0

Orange Bowl (Miami, Fla.)

1933	Miami 7, Manhattan 0
1934	Duquesne 33, Miami 7
1935	Bucknell 26, Miami 0
1936	Catholic University 20, Mississippi 19
1937	Duquesne 13, Mississippi State 12
1938	Alabama Poly. 6, Michigan State 0
1939	Tennessee 17, Oklahoma 0
1940	Georgia Tech 21, Missouri 7
1941	Mississippi State 14, Georgetown 7
1942	Georgia 40, Texas Christian 26
1943	Alabama 37, Boston College 21
1944	Louisiana State 19, Texas A & M 14
1945	Tulsa 26, Georgia Tech 12
1946	Miami 13, Holy Cross 6
1947	Rice 8, Tennessee 0
1948	Georgia Tech 20, Kansas 14
1949	Texas 41, Georgia 28
1950	Santa Clara 21, Kentucky 13
1951	Clemson 15, Miami (Fla.) 14
1952	Georgia Tech 17, Baylor 14
1953	Alabama 61, Syracuse 6
1954	Oklahoma 7, Maryland 0
1955	Duke 36, Nebraska 7
1956	Oklahoma 20, Maryland 6
1957	Colorado 27, Clemson 21
1958	Oklahoma 48, Duke 21
1959	Oklahoma 21, Syracuse 6
1960	Georgia 14, Missouri 0

Colts Crush College All-Stars

The National Football League's champions, the Baltimore Colts, triumphed in the 27th annual College All-Star Game in 1960, trouncing the collegians, 32-0, at Chicago's Soldier Field. It was the victory for the pros in the series; games have ended in ties.

GOLF

BE that golf originated in Hol-
—historians believe it did—but cer-
cotland fostered the game and is
for it. In fact, in 1457 the Scottish
nt, disturbed because football and
lured young Scots from the more
exercise of archery, passed an or-
that "futeball and golf be utterly
un and nocht usit." James I and
of the royal line of Stuarts were
nusiasts, whereby the game came
nown as "the royal and ancient
golf."

olf balls used in the early games
rather covered and stuffed with
Clubs of all kinds were fashioned
to suit individual players. The
ep in spreading the game came
change from the feather ball to
a-percha ball about 1850, and in
mal competition began with the
ment of an annual tournament
British open championship. There
ds of "golf clubs" in the United

States as far back as colonial days but
no proof of actual play before John Reid
and some friends laid out six holes on the
Reid lawn in Yonkers, N. Y., in 1888 and
played there with the golf balls and clubs
brought over from Scotland by Robert
Lockhart. This group then formed the St.
Andrews Golf Club of Yonkers, and golf
was established in this country.

However, it remained a rather sedate and
almost aristocratic pastime until a 20-year-
old ex-caddy, Francis Ouimet of Boston,
defeated two great British professionals,
Harry Vardon and Ted Ray, in the United
States Open championship at Brookline,
Mass., in 1913. This feat put the game and
Francis Ouimet on the front pages of the
newspapers and stirred a wave of enthu-
siasm for the sport. The greatest feat so
far in golf history was that of Robert Tyre
Jones, Jr. of Atlanta, Ga., in winning the
British Open, the British Amateur, the
U. S. Open and the U. S. Amateur titles
in one year, 1930.

Golf Statistics

Source: United States Golf Association.

UNITED STATES OPEN CHAMPIONS

Winner	Score	Where played	Year	Winner	Score	Where played
Nice Rawlins.....	173	Newport	1927	Tommy Armour (a).....	301	Oakmont
es Foulis.....	152	Shinnecock Hills	1928	Johnny Farrell (a).....	294	Olympia Fields
Lloyd.....	162	Chicago	1929	R. T. Jones, Jr.(a,b).....	294	Winged Foot
Herd.....	328	Myopia	1930	R. T. Jones, Jr.(b).....	287	Interlachen
e Smith.....	315	Baltimore	1931	Billy Burke (a).....	292	Inverness
y Vardon.....	313	Chicago	1932	Gene Sarazen.....	286	Fresh Meadow
e Anderson (a).....	331	Myopia	1933	John Goodman (b).....	287	North Shore
uchterlonie.....	307	Garden City	1934	Olin Dutra.....	293	Merion
e Anderson (a).....	307	Baltusrol	1935	Sam Parks, Jr.....	299	Oakmont
e Anderson.....	303	Glen View	1936	Tony Manero.....	282	Baltusrol
e Anderson.....	314	Myopia	1937	Ralph Guldahl.....	281	Oakland Hills
Smith.....	295	Onwentsia	1938	Ralph Guldahl.....	284	Cherry Hills
Ross.....	302	Philadelphia	1939	Byron Nelson (a).....	284	Philadelphia
McLeod (a).....	322	Myopia	1940	W. Lawson Little, Jr.(a)..	287	Canterbury
ge Sargent.....	290	Englewood	1941	Craig Wood.....	284	Colonial
Smith (a).....	298	Philadelphia	1942-45	No tournaments†		
McDermott (a).....	307	Chicago	1946	Lloyd Mangrum (a).....	284	Canterbury
McDermott.....	294	Buffalo	1947	Lew Worsham (a).....	282	St. Louis
is Ouimet (a,b).....	304	Brookline	1948	Ben Hogan.....	276	Riviera
er Hagen.....	290	Midlothian	1949	Cary Middlecoff.....	286	Medinah
ne D. Travers (b)...	297	Baltusrol	1950	Ben Hogan (a).....	287	Merion
es Evans, Jr.(b)....	286	Minikahda	1951	Ben Hogan.....	287	Oakland Hills
urnaments†			1952	Julius Boros.....	281	Northwood
er Hagen (a).....	301	Brae Burn	1953	Ben Hogan.....	283	Oakmont
rd Ray.....	295	Inverness	1954	Ed Furgol.....	284	Baltusrol
s M. Barnes.....	289	Columbia	1955	Jack Fleck (a).....	287	Olympic
Sarazen.....	288	Skokie	1956	Cary Middlecoff.....	281	Oak Hill
Jones, Jr.(a,b).....	296	Inwood	1957	Dick Mayer (a).....	298	Inverness
Walker.....	297	Oakland Hills	1958	Tommy Bolt.....	283	Southern Hills
acfarlane (a).....	291	Worcester	1959	Bill Casper, Jr.....	282	Winged Foot
Jones, Jr.(b).....	293	Scioto				

in playoff. (b) Amateur. * In 1898 competition was extended to 72 holes. † In 1917, Jock Hutchison,
won an Open Patriotic Tournament for the benefit of the American Red Cross at Whitmarsh Valley
N. J. ‡ In 1942, Ben Hogan, with a 271, won a Hale American National Open Tournament for the benefit
Relief Society and USO at Ridgemoor Country Club.

UNITED STATES AMATEUR CHAMPIONS

Year	Winner	Year	Winner	Year	Winner
1895	Charles B. Macdonald	1915	Robert A. Gardner	1937	John Goodman
1896	H. J. Whigham	1916	Charles Evans, Jr.	1938	Willie Turnesa
1897	H. J. Whigham	1919	S. D. Herron	1939	Marvin H. Ward
1898	Findlay S. Douglas	1920	Charles Evans, Jr.	1940	R. D. Chapman
1899	H. M. Harriman	1921	Jesse P. Guilford	1941	Marvin H. Ward
1900	Walter J. Travis	1922	Jess W. Sweetser	1946	Ted Bishop
1901	Walter J. Travis	1923	Max R. Marston	1947	Robert Riegel
1902	Louis N. James	1924	R. T. Jones, Jr.	1948	Willie Turnesa
1903	Walter J. Travis	1925	R. T. Jones, Jr.	1949	Charles Coe
1904	H. Chandler Egan	1926	George Von Elm	1950	Sam Urzetta
1905	H. Chandler Egan	1927	R. T. Jones, Jr.	1951	Billy Maxwell
1906	Eben M. Byers	1928	R. T. Jones, Jr.	1952	Jack Westland
1907	Jerome D. Travers	1929	H. R. Johnston	1953	Gene Littler
1908	Jerome D. Travers	1930	R. T. Jones, Jr.	1954	Arnold Palmer
1909	Robert A. Gardner	1931	Francis Ouimet	1955	Harvie Ward
1910	W. C. Fownes, Jr.	1932	C. R. Somerville	1956	Harvie Ward
1911	Harold H. Hilton	1933	G. T. Dunlap, Jr.	1957	Hillman Robbins
1912	Jerome D. Travers	1934	W. Lawson Little, Jr.	1958	Charles Coe
1913	Jerome D. Travers	1935	W. Lawson Little, Jr.	1959	Jack Nicklaus
1914	Francis Ouimet	1936	John W. Fischer		

UNITED STATES P. G. A. CHAMPIONS

Year	Winner	Year	Winner	Year	Winner
1916	Jim Barnes	1932	Olin Dutra	1947	Jim Ferrier
1919	Jim Barnes	1933	Gene Sarazen	1948	Ben Hogan
1920	Jock Hutchison	1934	Paul Runyan	1949	Sam Snead
1921	Walter Hagen	1935	Johnny Revolta	1950	Chandler Harper
1922	Gene Sarazen	1936	Denny Shute	1951	Sam Snead
1923	Gene Sarazen	1937	Denny Shute	1952	Jim Turnesa
1924	Walter Hagen	1938	Paul Runyan	1953	Walter Burkemo
1925	Walter Hagen	1939	Henry Picard	1954	Chick Harbert
1926	Walter Hagen	1940	Byron Nelson	1955	Doug Ford
1927	Walter Hagen	1941	Victor Ghezzi	1956	Jack Burke, Jr.
1928	Leo Diegel	1942	Sam Snead	1957	Lionel Hebert
1929	Leo Diegel	1944	Bob Hamilton	1958*	Dow Finsterwald
1930	Tommy Armour	1945	Byron Nelson	1959	Bob Rosburg
1931	Tom Creavy	1946	Ben Hogan		

* Match play prior to 1958.

UNITED STATES WOMEN'S OPEN CHAMPIONS

1946	Patty Berg (match play).....	—	1951	Betsy Rawls.....	293	1955	Fay Crocker.....	
1947	Betty Jameson.....	295	1952	Louise Suggs.....	284	1956	Mrs. Katherine Cornelius.....	
1948	Mrs. Mildred D. Zaharias.....	300	1953	Betsy Rawls (a).....	302	1957	Betsy Rawls.....	
1949	Louise Suggs.....	291	1954	Mrs. Mildred D. Zaharias.....	291	1958	Mickey Wright.....	
1950	Mrs. Mildred D. Zaharias.....	291				1959	Mickey Wright.....	

(a) Winner in playoff.

UNITED STATES WOMEN'S AMATEUR CHAMPIONS

1895	Mrs. C. S. Brown	1915	Mrs. C. H. Vanderbeck	1937	Mrs. J. A. Page, Jr.
1896	Beatrix Hoyt	1916	Alexa Stirling	1938	Patty Berg
1897	Beatrix Hoyt	1919	Alexa Stirling	1939	Betty Jameson
1898	Beatrix Hoyt	1920	Alexa Stirling	1940	Betty Jameson
1899	Ruth Underhill	1921	Marion Hollins	1941	Mrs. Frank Newell
1900	Frances C. Griscom	1922	Glenna Collett	1946	Mrs. M. D. Zaharias
1901	Genevieve Hecker	1923	Edith Cummings	1947	Louise Suggs
1902	Genevieve Hecker	1924	Mrs. D. C. Hurd	1948	Grace Lenczyk
1903	Bessie Anthony	1925	Glenna Collett	1949	Mrs. D. G. Porter
1904	G. M. Bishop	1926	Mrs. G. H. Stetson	1950	Beverly Hanson
1905	Pauline Mackay	1927	Mrs. M. B. Horn	1951	Dorothy Kirby
1906	Harriot S. Curtis	1928	Glenna Collett	1952	Mrs. Jacqueline Pung
1907	Margaret Curtis	1929	Glenna Collett	1953	Mary Lena Faulk
1908	K. C. Harley	1930	Glenna Collett	1954	Barbara Romack
1909	D. I. Campbell	1931	Helen Hicks	1955	Patricia Lesser
1910	D. I. Campbell	1932	Virginia Van Wie	1956	Marlene Stewart
1911	Margaret Curtis	1933	Virginia Van Wie	1957	Joanne Gunderson
1912	Margaret Curtis	1934	Virginia Van Wie	1958	Anne Quast
1913	Gladys Ravenscroft	1935	Mrs. E. H. Vare, Jr.	1959	Barbara McIntire
1914	Mrs. H. A. Jackson	1936	Pamela Barton		

BRITISH OPEN CHAMPIONS

Winner	Score	Year	Winner	Score	Year	Winner	Score
Park.....	174	1891	Hugh Kirkaldy.....	166	1926	R. T. Jones, Jr.....	291
Morris, Sr.....	163	1892*	H. H. Hilton.....	305	1927	R. T. Jones, Jr.....	285
Morris, Sr.....	163	1893	W. Auchterlonie.....	322	1928	Walter Hagen.....	292
Park.....	168	1894	J. H. Taylor.....	326	1929	Walter Hagen.....	292
Morris, Sr.....	167	1895	J. H. Taylor.....	322	1930	R. T. Jones, Jr.....	291
Strath.....	162	1896	Harry Vardon (a).....	316	1931	T. D. Armour.....	296
Park.....	169	1897	H. H. Hilton.....	314	1932	G. Sarazen.....	283
Morris, Sr.....	170	1898	Harry Vardon.....	307	1933	D. Shute (a).....	292
Morris, Jr.....	170	1899	Harry Vardon.....	310	1934	T. H. Cotton.....	283
Morris, Jr.....	154	1900	J. H. Taylor.....	309	1935	A. Perry.....	283
Morris, Jr.....	149	1901	James Braid.....	309	1936	A. H. Padgham.....	287
Morris, Jr.....	166	1902	Alex Herd.....	307	1937	T. H. Cotton.....	290
Kidd.....	179	1903	Harry Vardon.....	300	1938	R. A. Whitcombe.....	295
go Park.....	159	1904	Jack White.....	296	1939	R. Burton.....	290
e Park.....	166	1905	James Braid.....	318	1946	Sam Snead.....	290
Martin.....	176	1906	James Braid.....	300	1947	Fred Daly.....	293
ie Anderson.....	160	1907	Arnaud Massy.....	312	1948	Henry Cotton.....	284
e Anderson.....	157	1908	James Braid.....	291	1949	Bobby Locke (a).....	283
e Anderson.....	170	1909	J. H. Taylor.....	295	1950	Bobby Locke.....	279
Ferguson.....	162	1910	James Braid.....	299	1951	Max Faulkner.....	285
Ferguson.....	170	1911	Harry Vardon (a).....	303	1952	Bobby Locke.....	287
Ferguson.....	171	1912	E. Ray.....	295	1953	Ben Hogan.....	282
. Fernie (a).....	159	1913	J. H. Taylor.....	304	1954	Peter Thomson.....	283
Simpson.....	160	1914	Harry Vardon.....	306	1955	Peter Thomson.....	281
Martin.....	171	1920	George Duncan.....	303	1956	Peter Thomson.....	286
Brown.....	157	1921	Jock Hutchison (a).....	296	1957	Bobby Locke.....	279
ark, Jr.....	161	1922	Walter Hagen.....	300	1958	Peter Thomson (a).....	278
Burns.....	171	1923	A. G. Havers.....	295	1959	Gary Player.....	284
ark, Jr. (a).....	155	1924	Walter Hagen.....	301			
Ball.....	164	1925	Jim Barnes.....	300			

er in playoff. * In 1892 competition was extended to 72 holes.

BRITISH AMATEUR CHAMPIONS

Winner	Year	Winner	Year	Winner
MacFie	1907	John Ball	1934	W. Lawson Little, Jr.
Hutchinson	1908	E. A. Lassen	1935	W. Lawson Little, Jr.
Hutchinson	1909	R. Maxwell	1936	H. Thomson
Ball	1910	John Ball	1937	R. Sweeney, Jr.
Laidlay	1911	H. H. Hilton	1938	C. R. Yates
Ball	1912	John Ball	1939	A. Kyle
Laidlay	1913	H. H. Hilton	1946	J. Bruen
Ball	1914	J. L. C. Jenkins	1947	Willie Turnesa
L. Anderson	1920	Cyril J. H. Tolley	1948	Frank Stranahan
Ball	1921	W. I. Hunter	1949	Max McCready
B. Melville	1922	E. W. E. Holderness	1950	Frank Stranahan
Tait	1923	R. H. Wethered	1951	Richard D. Chapman
T. Allan	1924	E. W. E. Holderness	1952	Harvie Ward
Tait	1925	Robert Harris	1953	Joe Carr
Ball	1926	Jess W. Sweetser	1954	Doug Bachli
Hilton	1927	Dr. W. Tweddell	1955	Lt. Joe Conrad
Hilton	1928	T. P. Perkins	1956	John Beharrell
chings	1929	C. J. H. Tolley	1957	Reid Jack
xwell	1930	R. T. Jones, Jr.	1958	Joe Carr
Travis	1931	E. Martin Smith	1959	Deane Beman
Barry	1932	J. De Forest		
Robb	1933	Hon. M. Scott		

THE MASTERS TOURNAMENT WINNERS

Augusta National Golf Club, Augusta, Ga.

Winner	Score	Year	Winner	Score	Year	Winner	Score
Smith.....	284	1942	Byron Nelson (a).....	280	1952	Sam Snead.....	286
Sarazen (a).....	282	1943-45	No tournaments		1953	Ben Hogan.....	274
Smith.....	285	1946	Herman Keiser.....	282	1954	Sam Snead (a).....	289
Nelson.....	283	1947	Jimmy Demaret.....	281	1955	Cary Middlecoff.....	279
Picard.....	285	1948	Claude Harmon.....	279	1956	Jack Burke.....	289
Guidahl.....	279	1949	Sam Snead.....	282	1957	Doug Ford.....	283
Demaret.....	280	1950	Jimmy Demaret.....	283	1958	Arnold Palmer.....	284
Wood.....	280	1951	Ben Hogan.....	280	1959	Art Wall, Jr.....	284

r in playoff.

INTERNATIONAL TEAM MATCHES

Walker Cup Record

MEN (AMATEUR)

Year		Where played
1922	United States 8, Great Britain 4	Southampton
1923	United States 6, Great Britain 5	St. Andrews
1924	United States 9, Great Britain 3	Garden City G. C.
1926	United States 6, Great Britain 5	St. Andrews
1928	United States 11, Great Britain 1	Wheaton, Ill.
1930	United States 10, Great Britain 2	Royal St. George's
1932	United States 8, Great Britain 1	Brookline, Mass.
1934	United States 9, Great Britain 2	St. Andrews
1936	United States 9, Great Britain 0	Pine Valley G. C.
1938	Great Britain 7, United States 4	St. Andrews
1947	United States 8, Great Britain 4	St. Andrews
1949	United States 10, Great Britain 2	Winged Foot
1951	United States 6, Great Britain 3	Southport
1953	United States 9, Great Britain 3	Kittansett
1955	United States 10, Great Britain 2	St. Andrews
1957	United States 8, Great Britain 3	Minikahda
1959	United States 9, Great Britain 3	Muirfield

Ryder Cup Record

MEN (PROFESSIONAL)

Year		Where played
1927	United States 9½, Great Britain 2½	Worcester C. C.
1929	Great Britain 7, United States 5	Moortown, Eng.
1931	United States 9, Great Britain 3	Scioto C. C.
1933	Great Britain 6½, United States 5½	Southport, Eng.
1935	United States 9, Great Britain 3	Ridgewood C. C.
1937	United States 8, Great Britain 4	Southport, Eng.
1947	United States 11, Great Britain 1	Portland, Oreg.
1949	United States 7, Great Britain 5	Ganton, Eng.
1951	United States 9½, Great Britain 2½	Pinehurst, N. C.
1953	United States 6½, Great Britain 5½	Wentworth
1955	United States 8, Great Britain 4	Palm Springs
1957	Great Britain 7, United States 4	Workshop, Eng.
1959	United States 8½, Great Britain 3½	Palm Desert, Calif.

Curtis Cup Record

WOMEN AMATEUR

Year		Where played
1932	United States 5½, Great Britain 3½	Wentworth, Eng.
1934	United States 6½, Great Britain 2½	Chevy Chase
1936	United States 4½, Great Britain 4½	Gleneagles
1938	United States 5½, Great Britain 3½	Essex C. C.
1948	United States 6½, Great Britain 2½	Birkdale
1950	United States 7½, Great Britain 1½	Buffalo
1952	Great Britain 5, United States 4	Muirfield
1954	United States 6, Great Britain 3	Merion
1956	Great Britain 5, United States 4	Sandwich
1958	Great Britain 4½, United States 4½	Brae Burn

Americas Cup Record

MEN (AMATEUR)

Year	
1952	United States 12, Canada 10, Mexico 5
1954	United States 14, Canada 13, Mexico 0
1955	United States 29½, Mexico 13, Canada 11½
1958	United States 30, Canada 17, Mexico 7

World Amateur Championship

Year	(MEN)	
1958	Australia (a)	918
(a) Winner in playoff.		

NATIONAL COLLEGIATE CHAMPIONS

Conducted by United States Golf Association, 1897-1938; by National Collegiate Athletic Association, since 1939.

Year	Individual	Team
1897	Louis P. Bayard, Jr., Princeton	Yale
1898*	John Reid, Jr., Yale	Harvard
	James F. Curtis, Harvard	Yale
1899	Percy Pyne, 2d, Princeton	Harvard
1900	No tournament	
1901	H. Lindsley, Harvard	Harvard
1902*	Charles Hitchcock, Jr., Yale	Yale
	H. Chandler Egan, Harvard	Harvard
1903	F. O. Reinhart, Princeton	Harvard
1904	A. L. White, Harvard	Harvard
1905	Robert Abbott, Yale	Yale
1906	W. E. Clow, Jr., Yale	Yale
1907	Ellis Knowles, Yale	Yale
1908	H. H. Wilder, Harvard	Yale
1909	Albert Seckel, Princeton	Yale
1910	Robert E. Hunter, Yale	Yale
1911	George C. Stanley, Yale	Yale
1912	F. C. Davison, Harvard	Yale
1913	Nathaniel Wheeler, Yale	Yale
1914	Edward P. Allis, 3d, Harvard	Princeton
1915	Francis R. Blossom, Yale	Yale
1916	J. W. Hubbell, Harvard	Princeton
1917-18	No tournaments	
1919	A. L. Walker, Jr., Columbia	Princeton
1920	Jess W. Sweetser, Yale	Princeton
1921	J. Simpson Dean, Princeton	Dartmouth
1922	Pollack Boyd, Dartmouth	Princeton
1923	Dexter Cummings, Yale	Princeton
1924	Dexter Cummings, Yale	Yale
1925	G. Fred Lamprecht, Tulane	Yale
1926	G. Fred Lamprecht, Tulane	Yale
1927	Watts Gunn, Georgia Tech	Princeton
1928	M. J. McCarthy, Jr., Georgetown	Princeton
1929	Tom Aycock, Yale	Princeton
1930	George T. Dunlap, Jr., Princeton	Princeton
1931	George T. Dunlap, Jr., Princeton	Yale
1932	John W. Fischer, Jr., Michigan	Yale
1933	Walter Emery, Oklahoma	Yale
1934	Charles R. Yates, Georgia Tech	Michigan
1935	Ed White, U. of Texas	Michigan
1936	Charles Kocsis, Michigan	Yale
1937	Fred Haas, Jr., L. S. U.	Princeton
1938	John P. Burke, Georgetown	Stanford
1939	Vincent D'Antoni, Tulane	Stanford
1940	F. Dixon Brooke, Virginia	Princeton
1941	Earl Stewart, L. S. U.	L. S. U.
1942	Frank Tatum, Jr., Stanford	Stanford
1943	Wallace Ulrich, Carleton	L. S. U.
1944	Louis Lick, Minnesota	Yale
1945	John Lorms, Ohio State	Notre Dame
1946	George Hamer, Georgia	Ohio State
1947	Dave Barclay, Michigan	Stanford
1948	Bobby Harris, San Jose St.	L. S. U.
1949	Harvie Ward, North Carolina	San Jose St.
1950	Fred Wampler, Purdue	No. T.
1951	Tom Nieporte, Ohio State	No. T.
1952	Jim Vickers, Oklahoma	No. T.
1953	Earl Moeller, Okla. A. & M.	Stanford
1954	Hillman Robbins, Jr., Memphis St.	S. M.
1955	Joe Campbell, Purdue	L. S. U.
1956	Rick Jones, Ohio State	Houston
1957	Rex Baxter, Houston	Houston
1958	Phil Rodgers, Houston	So. Cal.
1959	Richard Crawford, Houston	Houston

* Two tournaments, in spring and fall.

LAWN TENNIS

TENNIS is a comparatively modern modification of the ancient game of tennis. Major Walter Clopton Wingfield thought that something like court might be played outdoors on lawns. On December, 1873, at Nantclwyd, he introduced his new game under the name of *Sphairistike* at a lawn party. It was a success and spread rapidly, but the name was a total failure and it immediately disappeared when all players and spectators began to refer to the new game as "lawn tennis." In the part of 1874 a young lady named Miss Ewing Outerbridge returned from Australia to New York, bringing with her complements and necessary equipment for the new game that she had obtained from a British Army supply store in Bermuda. Miss Outerbridge and friends played the first game of lawn tennis in the United States on the grounds of the Staten Island

Cricket and Baseball Club in the spring of 1874.

For a few years the new game went along in haphazard fashion under varying rules. Tennis balls were of no standard size or texture. The nets were set at different heights up to 5 feet on the side and 4 feet in the middle. Some courts were marked out in hour-glass shape, narrow in the middle and wide at both ends. But about 1880 standard measurements for the court and standard equipment within definite limits became the rule. In 1881 the United States Lawn Tennis Association was formed and conducted the first national championship at Newport, R. I. The international matches for the Davis Cup began with a series between the British and United States players on the courts of the Longwood Cricket Club, Chestnut Hill, Mass., in 1900, with the home players winning.

DAVIS CUP CHALLENGE ROUND RESULTS

MEN

Matches in 1901, 1910, 1915-18, and 1940-45.

Result	Where played			
United States 5, British Isles 0.....	Chestnut Hill	1930	France 4, United States 1.....	Paris
United States 3, British Isles 2.....	Brooklyn	1931	France 3, Great Britain 2.....	Paris
British Isles 4, United States 1.....	Chestnut Hill	1932	France 3, United States 2.....	Paris
British Isles 5, Belgium 0.....	Wimbledon	1933	Great Britain 3, France 2.....	Paris
British Isles 5, United States 0.....	Wimbledon	1934	Great Britain 4, United States 1.....	Wimbledon
British Isles 5, United States 0.....	Wimbledon	1935	Great Britain 5, United States 0.....	Wimbledon
Australasia 3, British Isles 2.....	Wimbledon	1936	Great Britain 3, Australia 2.....	Wimbledon
Australasia 3, United States 2.....	Melbourne	1937	United States 4, Great Britain 1.....	Wimbledon
Australasia 5, United States 0.....	Sydney	1938	United States 3, Australia 2.....	Philadelphia
Australasia 5, United States 0.....	Christchurch	1939	Australia 3, United States 2.....	Haverford
British Isles 3, Australasia 2.....	Melbourne	1946	United States 5, Australia 0.....	Melbourne
United States 3, British Isles 2.....	Wimbledon	1947	United States 4, Australia 1.....	Forest Hills
Australasia 3, United States 2.....	Forest Hills	1948	United States 5, Australia 0.....	Forest Hills
Australasia 4, British Isles 1.....	Sydney	1949	United States 4, Australia 1.....	Forest Hills
United States 5, Australasia 0.....	Auckland	1950	Australia 4, United States 1.....	Forest Hills
United States 5, Japan 0.....	Forest Hills	1951	Australia 3, United States 2.....	Sydney
United States 4, Australasia 1.....	Forest Hills	1952	Australia 4, United States 1.....	Adelaide
United States 4, Australasia 1.....	Forest Hills	1953	Australia 3, United States 2.....	Melbourne
United States 5, Australasia 0.....	Philadelphia	1954	United States 3, Australia 2.....	Sydney
United States 5, France 0.....	Philadelphia	1955	Australia 5, United States 0.....	Forest Hills
United States 4, France 1.....	Philadelphia	1956	Australia 5, United States 0.....	Adelaide
United States 3, United States 2.....	Philadelphia	1957	Australia 3, United States 2.....	Melbourne
United States 4, United States 1.....	Paris	1958	United States 3, Australia 2.....	Brisbane
United States 3, United States 2.....	Paris	1959	Australia 3, United States 2.....	Forest Hills

WIGHTMAN CUP RECORD

WOMEN

Result	Where played			
United States 7, England 0.....	Forest Hills	1938	United States 5, England 2.....	Wimbledon
United States 6, United States 1.....	Wimbledon	1939	United States 5, England 2.....	Forest Hills
United States 4, United States 3.....	Forest Hills	1946	United States 7, England 0.....	Wimbledon
United States 4, England 3.....	Wimbledon	1947	United States 7, England 0.....	Forest Hills
United States 5, England 2.....	Forest Hills	1948	United States 6, England 1.....	Wimbledon
United States 4, United States 3.....	Wimbledon	1949	United States 7, England 0.....	Haverford
United States 4, England 3.....	Forest Hills	1950	United States 7, England 0.....	Wimbledon
United States 5, England 2.....	Forest Hills	1951	United States 6, England 1.....	Longwood
United States 4, England 3.....	Wimbledon	1952	United States 7, England 0.....	Wimbledon
United States 5, England 2.....	Forest Hills	1953	United States 7, England 0.....	Rye, N. Y.
United States 4, England 3.....	Wimbledon	1954	United States 6, England 0.....	Wimbledon
United States 4, England 3.....	Forest Hills	1955	United States 6, England 1.....	Rye, N. Y.
United States 5, England 2.....	Wimbledon	1956	United States 5, England 2.....	Wimbledon
United States 4, England 3.....	Forest Hills	1957	United States 6, England 1.....	Sewickley, Pa.
United States 4, England 3.....	Wimbledon	1958	England 4, United States 3.....	Wimbledon
United States 6, England 1.....	Forest Hills	1959	United States 4, England 3.....	Sewickley, Pa.

UNITED STATES CHAMPIONS

Men's Singles

1881-87—Richard D. Sears	1906—William J. Clothier	1930—John H. Doeg	1944-45—Frank Parker
1888-89—Henry Slocum, Jr.	1907-11—William A. Larned	1931-32—H. E. Vines, Jr.	1946-47—Jack Kramer
1890-92—Oliver S. Campbell	1912-13—M. E. McLoughlin*	1933-34—Fred J. Perry	1948-49—Richard Gonzal
1893-94—Robert D. Wrenn	1914—R. N. Williams II	1935—Wilmer L. Allison	1950—Arthur Larsen
1895—Fred H. Hovey	1915—William Johnston	1936—Fred J. Perry	1951-52—Frank Sedgman
1896-97—Robert D. Wrenn	1916—R. N. Williams II	1937-38—J. Donald Budge	1953—Tony Trabert
1898-1900—Malcolm D. Whitman	1917-18—R. Lindley Murray†	1939—Robert L. Riggs	1954—E. Victor Seixas,
1901-02—William A. Larned	1919—William Johnston	1940—Donald McNeill	1955—Tony Trabert
1903—Hugh L. Doherty	1920-25—William T. Tilden II	1941—Robert L. Riggs	1956—Ken Rosewall
1904—Holcombe Ward	1926-27—Jean Rene Lacoste	1942—Frederick R. Schroeder	1957—Mal Anderson
1905—Beals C. Wright	1928—Henri Cochet	1943—Joseph Hunt	1958—Ashley Cooper
	1929—William T. Tilden II		1959—Neale Fraser

* Challenge round abandoned in 1912. † Patriotic tournament in 1917.

Men's Doubles

1881—C. M. Clark-F. W. Taylor	1918—W. T. Tilden II-Vincent Richards†	1942—Gardnar Mulloy-W. F. Talbert
1882-84—R. D. Sears-James Dwight	1919—N. E. Brookes-G. L. Patterson	1943—Jack Kramer-F. A. Parker
1885—R. D. Sears-J. S. Clark	1920—William Johnston-C. J. Griffin	1944—Don McNeill-Robert Falkenbu
1886-87—R. D. Sears-James Dwight	1921-22—W. T. Tilden II-Vincent Richards	1945—Gardnar Mulloy-W. F. Talbert
1888—O. S. Campbell-V. G. Hall	1923—W. T. Tilden II-B. I. C. Norton	1946—Gardnar Mulloy-W. F. Talbert
1889—H. W. Slocum, Jr.-H. A. Taylor	1924—H. O. Kinsey-R. G. Kinsey	1947—Jack Kramer-F. R. Schroeder
1890—V. G. Hall-Clarence Hobart	1925-26—Vincent Richards-R. N. Williams II	1948—Gardnar Mulloy-W. F. Talbert
1891-92—O. S. Campbell-R. P. Huntington	1927—W. T. Tilden II-F. T. Hunter	1949—John Bromwich-William Sidw
1893-94—Clarence Hobart-F. H. Hovey	1928—G. M. Lott, Jr.-V. F. Hennessey	1950—John Bromwich-Frank Sedgman
1895—M. G. Chace-R. D. Wrenn	1929-30—G. M. Lott, Jr.-J. H. Doeg	1951—Frank Sedgman-Ken McGregor
1896—C. B. Neel-S. R. Neel	1931—W. L. Allison-John Van Ryn	1952—E. Victor Seixas, Jr.-Mervyn F.
1897-98—L. E. Ware-G. P. Sneldon, Jr.	1932—E. H. Vines, Jr.-Keith Gledhill	1953—Mervyn Rose-Rex Hartwig
1899-1901—Holcombe Ward-D. F. Davis	1933-34—G. M. Lott, Jr.-L. R. Stoeft	1954—E. Victor Seixas, Jr.-Tony Trabert
1902-03—R. F. Doherty-H. L. Doherty	1935—W. L. Allison-John Van Ryn	1955—Kosei Kamo-Atsushi Miyagi
1904-1906—Holcombe Ward-B. C. Wright	1936—J. D. Budge-C. G. Mako	1956—Lewis Hoad-Ken Rosewall
1907-10—H. H. Hackett-F. B. Alexander	1937—Baron G. von Cramm-H. Henkel	1957—Ashley Cooper-Neale Fraser
1911—R. D. Little-G. F. Touchard	1938—J. D. Budge-C. G. Mako	1958—Ham Richardson-Alex Olmedo
1912-14—M. E. McLoughlin-T. C. Bundy	1939—A. K. Quist-J. E. Bromwich	1959—Neale Fraser-Roy Emerson
1915-16—William Johnston-C. J. Griffin	1940-41—Jack Kramer-F. R. Schroeder	
1917—F. B. Alexander-H. A. Throckmorton*		

* Patriotic tournament in 1917.
† Challenge round abandoned in 1912.

Women's Singles

1887—Ellen F. Hansell	1901—Elisabeth H. Moore	1915-18—Molla Bjurstedt*†	1937—Anita Lizana
1888-89—Bertha L. Townsend	1902—Marion Jones	1919—Mrs. G. W. Wightman	1938-40—Alice Marble
1890—Ellen C. Roosevelt	1903—Elisabeth H. Moore	1920-22—Mrs. Molla B. Mallory	1941—Mrs. Sarah P. Cooke
1891-92—Mabel E. Cahill	1904—May G. Sutton	1923-25—Helen N. Wills	1946—Pauline M. Betz
1893—Aline M. Terry	1905—Elisabeth H. Moore	1926—Mrs. Molla B. Mallory	1947—A. Louise Brough
1894—Helen R. Helwig	1906—Helen Homans	1927-29—Helen N. Wills	1948-50—Mrs. M. O. Dunt
1895—Juliette P. Atkinson	1907—Evelyn Sears	1930—Betty Nuthall	1951-53—Maureen Connolly
1896—Elisabeth H. Moore	1908—Mrs. Maud Bargar-Wallach	1931—Mrs. Helen W. Moody	1954-55—Doris Hart
1897-98—Juliette P. Atkinson	1909-11—Hazel V. Hotchkiss	1932-35—Helen Jacobs	1956—Shirley Fry
1899—Marion Jones	1912-14—Mary K. Browne	1936—Alice Marble	1957-58—Althea Gibson
1900—Myrtle McAteer			1959—Maria Bueno

* Louise Hammond won patriotic tournament in 1917.
† Challenge round abandoned in 1918.

Women's Doubles

1890—Ellen C. Roosevelt-Grace W. Roosevelt	1905—Helen Homans-Carrie B. Neely
1891—Mabel E. Cahill-Mrs. W. F. Morgan	1906—Mrs. L. S. Coe-Mrs. D. S. Platt
1892—Mabel E. Cahill-A. M. McKinley	1907—Marie Weimer-Carrie B. Neely
1893—Aline M. Terry-Hattie Butler	1908—Evelyn Sears-Margaret Curtis
1894-95—Helen R. Helwig-J. P. Atkinson	1909-10—Hazel V. Hotchkiss-Edith E. Rotch
1896—E. H. Moore-J. P. Atkinson	1911—Hazel V. Hotchkiss-Eleonora Sears
1897-98—J. P. Atkinson-Kathleen Atkinson	1912—Dorothy Green-Mary K. Browne
1899—Jane W. Craven-Myrtle McAteer	1913-14—Mary K. Browne-Mrs. R. H. Williams
1900—Edith Parker-Hallie Champlin	1915—Mrs. G. W. Wightman-Eleonora Sears
1901—J. P. Atkinson-Myrtle McAteer	1916-17—Molla Bjurstedt-Eleonora Sears
1902—J. P. Atkinson-Marion Jones	1918-20—Marion Zinderstein-Eleanor Goss
1903—E. H. Moore-Carrie B. Neely	1921—Mary K. Browne-Mrs. R. H. Williams
1904—May G. Sutton-Miriam Hall	1922—Mrs. J. B. Jessup-Helen N. Wills

leen McKane-Mrs. B. C. Covell
 G. W. Wightman-Helen N. Wills
 K. Browne-Helen N. Wills
 beth Ryan-Eleanor Goss
 L. A. Godfree-Ermytrude Harvey
 G. W. Wightman-Helen N. Wills
 Phoebe Watson-Mrs. L. R. C. Michell
 y Nuthall-Sarah Palfrey
 y Nuthall-Mrs. E. B. Wittingstall
 y Jacobs-Sarah Palfrey
 y Nuthall-Freda James

1934—Helen Jacobs-Sarah Palfrey
 1935—Helen Jacobs-Mrs. S. P. Fabyan
 1936—Mrs. M. G. Van Ryn-Carolin Babcock
 1937-40—Mrs. S. P. Fabyan-Alice Marble
 1941—Mrs. S. P. Cooke-Margaret Osborne
 1942-47—A. Louise Brough-Margaret Osborne
 1948-50—A. Louise Brough-Mrs. Margaret O. du Pont
 1951-54—Doris Hart-Shirley Fry
 1955-57—A. Louise Brough-Mrs. Margaret O. du Pont
 1958-59—Darlene Hard-Jeanne Arth

BRITISH (WIMBLEDON) CHAMPIONS

Men's Singles

Gore	1901—A. W. Gore	1926—J. Borotra	1947—John A. Kramer
Hadow	1902-06—H. L. Doherty	1927—H. Cochet	1948—R. Falkenburg
T. Hartley	1907—N. E. Brookes	1928—R. Lacoste	1949—F. R. Schroeder
Renshaw	1908-09—A. W. Gore	1929—H. Cochet	1950—Budge Patty
Lawford	1910-13—A. F. Wilding	1930—W. T. Tilden II	1951—Richard Savitt
enshaw	1914—N. E. Brookes	1931—S. B. Wood	1952—Frank Sedgman
enshaw	1919—G. L. Patterson	1932—H. E. Vines, Jr.	1953—E. Victor Seixas
Hamilton	1920-21—W. T. Tilden II	1933—J. H. Crawford	1954—Jaroslav Drobny
Baddeley	1922—G. L. Patterson	1934-36—F. J. Perry	1955—Tony Trabert
Pim	1923—W. M. Johnston	1937-38—J. D. Budge	1956-57—Lewis Hoad
Baddeley	1924—J. Borotra	1939—R. L. Riggs	1958—Ashley Cooper
Mahony	1925—R. Lacoste	1946—Yvon Petra	1959—Alex Olmedo
R. F. Doherty			

Men's Doubles

Erskine-H. F. Lawford	1909—A. W. Gore-H. R. Barrett	1934—G. M. Lott-L. R. Stoefen
Renshaw-E. Renshaw	1910—A. F. Wilding-M. J. G. Ritchie	1935—J. H. Crawford-A. K. Quist
Hartley-R. T. Richardson	1911—M. Decugis-A. H. Gobert	1936—C. R. D. Tuckey-G. P. Hughes
Grinstead-C. E. Welldon	1912-13—H. R. Barrett-C. P. Dixon	1937-38—J. D. Budge-C. Gene Mako
Renshaw-E. Renshaw	1914—N. E. Brookes-A. F. Wilding	1939—R. L. Riggs-E. T. Cooke
Wes-Lyon-H. W. W. Wilber-	1919—R. V. Thomas-P. O'Hara Wood	1946—J. A. Kramer-Tom Brown
ce	1920—R. N. Williams II-C. S. Garland	1947—J. A. Kramer-R. Falkenburg
Renshaw-E. Renshaw	1921—R. Lycett-M. Woosnam	1948—J. Bromwich-F. Sedgman
im-F. O. Stoker	1922—R. Lycett-J. O. Anderson	1949—F. Parker-R. Gonzales
Baddeley-H. Baddeley	1923—R. Lycett-L. A. Godfree	1950—J. Bromwich-A. Quist
Barrow-E. W. Lewis	1924—V. Richards-F. T. Hunter	1951-52—F. Sedgman-K. McGregor
im-F. O. Stoker	1925—J. Borotra-R. Lacoste	1953—K. Rosewall-L. Hoad
Baddeley-H. Baddeley	1926—H. Cochet-J. Brugnon	1954—R. Hartwig-M. Rose
R. F. Doherty-H. L. Doherty	1927—W. T. Tilden II-F. T. Hunter	1955—R. Hartwig-L. Hoad
Smith-F. L. Riseley	1928—H. Cochet-J. Brugnon	1956—L. Hoad-K. Rosewall
F. Doherty-H. L. Doherty	1929-30—W. Allison-J. Van Ryn	1957—G. Mulloy-B. Patty
Smith-F. L. Riseley	1931—G. M. Lott-J. Van Ryn	1958—Sven Davidson-Ulf Schmidt
Brookes-A. F. Wilding	1932-33—J. Borotra-J. Brugnon	1959—Roy Emerson-Neale Fraser
Wilding-M. J. G. Ritchie		

Women's Singles

Watson	1902—M. E. Robb	1924—K. McKane	1938—Mrs. F. S. Moody
ingley	1903-04—D. K. Douglas	1925—Mlle. Lenglen	1939—Alice Marble
Dod	1905—M. Sutton	1926—Mrs. Godfree	1946—Pauline M. Betz
illyard	1906—D. K. Douglas	1927-29—Helen Wills	1947—Margaret Osborne
e	1907—M. Sutton	1930—Mrs. F. S. Moody	1948-50—A. Louise Brough
Dod	1908—Mrs. Sterry	1931—Fri. C. Aussen	1951—Doris Hart
illyard	1909—D. Boothby	1932-33—Mrs. F. S. Moody	1952-54—M. Connolly
Cooper	1910-11—Mrs. L. Chambers	1934—D. E. Round	1955—A. Louise Brough
illyard	1912—Mrs. Larcombe	1935—Mrs. F. S. Moody	1956—Shirley Fry
per	1913-14—Mrs. L. Chambers	1936—Helen Jacobs	1957-58—Althea Gibson
Mrs. Hillyard	1919-23—Mlle. Lenglen	1937—D. E. Round	1959—Maria Bueno
erry			

Women's Doubles

McNair-Miss Boothby	1931—Mrs. Shepherd-Barron-Mrs. Mud-	1948-50—A. L. Brough-Mrs. M. O.
-A. M. Morton	ford King	du Pont
g. Lenglen-E. Ryan	1932—Mlle. D. Metaxa-Mlle. J. Sigart	1951-53—Doris Hart-Shirley Fry
Wightman-Helen Wills	1933-34—E. Ryan-Mme. Mathieu	1954—A. L. Brough-Mrs. M. O. du Pont
nglen-E. Ryan	1935-36—K. E. Stammers-F. James	1955—Angela Mortimer-Ann Shilcock
-M. K. Browne	1937—Mme. S. Mathieu-A. M. Yorka	1956—Althea Gibson-Angela Buxton
-Helen Wills	1938-39—A. Marble-Mrs. S. P. Fabyan	1957—Althea Gibson-Darlene Hard
Watson-P. Saunders	1946—A. L. Brough-M. Osborne	1958—Althea Gibson-Maria Bueno
Watson-Mrs. Michell	1947—Doris Hart-Mrs. Pat Todd	1959—Darlene Hard-Jeanne Arth
-Mrs. F. S. Moody		

THE OLYMPIC GAMES

(W)—Site of Winter Games. (S)—Site of Summer Games.

1896—Athens	1924—Chamonix (W)	1936—Garmisch-Parten-	1956—Cortina d'
1900—Paris	1924—Paris (S)	kirchen (W)	pezzo, Italy
1904—St. Louis	1928—St. Moritz (W)	1936—Berlin (S)	1956—Melbourne
1906—Athens	1928—Amsterdam (S)	1948—St. Moritz (W)	1960—Squaw Va
1908—London	1932—Lake Placid (W)	1948—London (S)	Calif. (W)
1912—Stockholm	1932—Los Angeles (S)	1952—Oslo (W)	1960—Rome (S)
1920—Antwerp		1952—Helsinki (S)	

THE first Olympic Games of which there is record occurred in 776 B.C. and consisted of one event, a great foot race of about 200 yards held on a plain by the River Alpheus (now the Ruphla) just outside the little town of Olympia in Greece. It was from that date that the Greeks began to keep their calendar by "Olympiads," the four-year spans between the celebrations of the famous games. There was a religious as well as an athletic significance to the ancient games and the shrines, temples and sacred fires within the Olympic enclosure were the scenes of worship all through the year whereas the Olympic Games, at the height of their popularity, never lasted more than five days and were held only once every four years.

The competition was entirely amateur at the start and the only prizes were laurel wreaths. Only free Greek citizens were allowed to compete and they had to undergo a strict training course that lasted ten months. But civic rivalry led to trickery and professionalism and the

games became degraded after some centuries. When Rome conquered Greece Roman emperors turned the Olympic Games from patriotic, religious and athletic festivals into carnivals and circuses. They dragged on malodorously until they were finally halted by decree of Emperor Theodosius I of Rome in A.D. 394.

The modern Olympic Games, started in Athens in 1896, are the result of the devotion of a French educator, Baron Pierre de Coubertin, to the idea that, since boys and athletics have been together down the ages, education and athletics might well go hand-in-hand toward a better international understanding. He planned a revival of the ancient Olympic Games on a world-wide basis and succeeded in getting nine nations to send athletes to the first of the modern Olympic Games in 1896. Since then more than 35,000 athletes representing about 60 nations have competed in the games.

Interrupted for the second time by the outbreak of the first world war, the modern Olympic Games were resumed in London in 1948.

OLYMPIC GAMES CHAMPIONS, 1896-1956

(See index for 1960 Olympic results)

TRACK AND FIELD—MEN

60-Meter Run

1900	Alvin Kraenzlein, United States	7s.
1904	Archie Hahn, United States	7s.

100-Meter Run

1896	Thomas Burke, United States	12s.
1900	F. W. Jarvis, United States	10.8s.
1904	Archie Hahn, United States	11s.
1906	Archie Hahn, United States	11.2s.
1908	Reginald Walker, South Africa	10.8s.
1912	Ralph Craig, United States	10.8s.
1920	Charles Paddock, United States	10.8s.
1924	Harold Abrahams, Great Britain	10.6s.
1928	Percy Williams, Canada	10.8s.
1932	Eddie Tolan, United States	10.3s.
1936	Jesse Owens, United States	10.3s.*
1948	Harrison Dillard, United States	10.3s.
1952	Lindy Remigino, United States	10.4s.
1956	Bobby Morrow, United States	10.5s.

* Wind assisted.

200-Meter Run

1900	J. W. B. Tewksbury, United States	22.2s.
1904	Archie Hahn, United States	21.6s.
1908	Robert Kerr, Canada	22.4 s

1912	Ralph Craig, United States	10.8s.
1920	Allan Woodring, United States	11.2s.
1924	Jackson Scholz, United States	11.2s.
1928	Percy Williams, Canada	10.8s.
1932	Eddie Tolan, United States	10.3s.
1936	Jesse Owens, United States	10.3s.
1948	Melvin E. Patton, United States	10.3s.
1952	Andrew Stanfield, United States	10.3s.
1956	Bobby Morrow, United States	10.5s.

400-Meter Run

1896	Thomas Burke, United States	10.8s.
1900	Maxey Long, United States	11.2s.
1904	Harry Hillman, United States	11.2s.
1906	Paul Pilgrim, United States	11.2s.
1908	Wyndham Halswelle, Great Britain (walkover)	
1912	Charles Reidpath, United States	11.2s.
1920	Bevil Rudd, South Africa	11.2s.
1924	Eric Liddell, Great Britain	11.2s.
1928	Ray Barbuti, United States	11.2s.
1932	William Carr, United States	11.2s.
1936	Archie Williams, United States	11.2s.
1948	Arthur Wint, Jamaica, B.W.I.	11.2s.
1952	George Rhoden, Jamaica, B. W. I.	11.2s.
1956	Charles Jenkins, United States	11.2s.

800-Meter Run

win Flack, Great Britain.....	2m.11s.
red Tysoe, Great Britain.....	2m.1.4s.
mes Lightbody, United States.....	1m.56s.
ul Pilgrim, United States.....	2m.1.2s.
el Sheppard, United States.....	1m.52.8s.
d Meredith, United States.....	1m.51.9s.
bert Hill, Great Britain.....	1m.53.4s.
uglas Lowe, Great Britain.....	1m.52.4s.
uglas Lowe, Great Britain.....	1m.51.8s.
omas Hampson, Great Britain.....	1m.49.8s.
nn Woodruff, United States.....	1m.52.9s.
lvin Whitfield, United States.....	1m.49.2s.
lvin Whitfield, United States.....	1m.49.2s.
m Courtney, United States.....	1m.47.7s.

1,500-Meter Run

win Flack, Great Britain.....	4m.33.2s.
arles Bennett, Great Britain.....	4m.6s.
mes Lightbody, United States.....	4m.5.4s.
mes Lightbody, United States.....	4m.12s.
l Sheppard, United States.....	4m.3.4s.
old Jackson, Great Britain.....	3m.56.8s.
ert Hill, Great Britain.....	4m.1.8s.
vo Nurmi, Finland.....	3m.53.6s.
ry Larva, Finland.....	3m.53.2s.
gi Beccali, Italy.....	3m.51.2s.
k Lovelock, New Zealand.....	3m.47.8s.
ri Eriksson, Sweden.....	3m.49.8s.
eph Barthel, Luxemburg.....	3m.45.2s.
Delany, Ireland.....	3m.41.2s.

5,000-Meter Run

mes Kolehmainen, Finland.....	14m.36.6s.
eph Guillemot, France.....	14m.55.6s.
vo Nurmi, Finland.....	14m.31.2s.
ie Ritola, Finland.....	14m.38s.
ri Lehtinen, Finland.....	14m.30s.
nar Hockert, Finland.....	14m.22.2s.
ton Reiff, Belgium.....	14m.17.6s.
ie Zatopek, Czechoslovakia.....	14m.6.6s.
imir Kuts, U.S.S.R.....	13m.39.6s.

5-Mile Run

awtreay, Great Britain.....	26m.26.2s.
Voigt, Great Britain.....	25m.11.2s.

10,000-Meter Run

mes Kolehmainen, Finland.....	31m.20.8s.
vo Nurmi, Finland.....	31m.45.8s.
ie Ritola, Finland.....	30m.23.2s.
vo Nurmi, Finland.....	30m.18.8s.
sz Kusocinski, Poland.....	30m.11.4s.
ri Salminen, Finland.....	30m.15.4s.
Zatopek, Czechoslovakia.....	29m.59.6s.
Zatopek, Czechoslovakia.....	29m.17s.
imir Kuts, U.S.S.R.....	28m.45.6s.

Marathon

don Loues, Greece.....	2h.55m.20s.
el Teato, France.....	2h.59m.
as Hicks, United States.....	3h.28m.53s.
Sherring, Canada.....	2h.51m.23.6s.
J. Hayes, United States.....	2h.55m.18.4s.
eth McArthur, South Africa.....	2h.36m.54.8s.
mes Kolehmainen, Finland.....	2h.32m.35.8s.
Stenroos, Finland.....	2h.41m.22.6s.
El Ouafi, France.....	2h.32m.57s.
Zabala, Argentina.....	2h.31m.36s.
Son, Japan.....	2h.29m.19.2s.
Cabrera, Argentina.....	2h.34m.51.6s.
Zatopek, Czechoslovakia.....	2h.23m.3.2s.
Mimoun, France.....	2h.25m.

110-Meter Hurdles

1896 Thomas Curtis, United States.....	17.6s.
1900 Alvin Kraenzlein, United States.....	15.4s.
1904 Frederick Schule, United States.....	16s.
1906 R. G. Leavitt, United States.....	16.2s.
1908 Forest Smithson, United States.....	15s.
1912 Frederick Kelly, United States.....	15.1s.
1920 E. J. Thomson, Canada.....	14.8s.
1924 Daniel Kinsey, United States.....	15s.
1928 Sydney Atkinson, South Africa.....	14.8s.
1932 George Saling, United States.....	14.6s.
1936 Forrest Towns, United States.....	14.2s.
1948 William Porter, United States.....	13.9s.
1952 Harrison Dillard, United States.....	13.7s.
1956 Lee Calhoun, United States.....	13.5s.

200-Meter Hurdles

1900 Alvin Kraenzlein, United States.....	25.4s.
1904 Harry Hillman, United States.....	24.6s.

400-Meter Hurdles

1900 J. W. B. Tewksbury, United States.....	57.6s.
1904 Harry Hillman, United States.....	53s.
1908 Charles Bacon, United States.....	55s.
1920 Frank Loomis, United States.....	54s.
1924 F. Morgan Taylor, United States.....	52.6s.
1928 Lord David Burghley, Great Britain.....	53.4s.
1932 Robert Tisdall, Ireland.....	51.8s.*
1936 Glenn Hardin, United States.....	52.4s.
1948 Roy Cochran, United States.....	51.1s.
1952 Charles Moore, United States.....	50.8s.
1956 Glenn Davis, United States.....	50.1s.

cord not allowed.

2,500-Meter Steeplechase

1900 George Orton, United States.....	7m.34s.
1904 James Lightbody, United States.....	7m.39.6s.

3,000-Meter Steeplechase

1920 Percy Hodge, Great Britain.....	10m.2.4s.
1924 Willie Ritola, Finland.....	9m.33.6s.
1928 Toivo Loukola, Finland.....	9m.21.8s.
1932 Volmari Iso-Hollo, Finland.....	10m.33.4s.*
1936 Volmari Iso-Hollo, Finland.....	9m.3.8s.
1948 Thure Sjostrand, Sweden.....	9m.4.6s.
1952 Horace Ashenfelter, United States.....	8m.45.4s.
1956 Chris Brasher, Great Britain.....	8m.41.2s.

* About 3,450 meters—extra lap by error.

3,200-Meter Steeplechase

1908 A. Russell, Great Britain.....	10m.47.8s.
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4,000-Meter Steeplechase

1900 John Rimmer, Great Britain.....	12m.58.4s.
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8,000-Meter Cross-Country

1912 Hannes Kolehmainen, Finland.....	45m.11.6s.
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10,000-Meter Cross-Country

1920 Paavo Nurmi, Finland.....	27m.15s.
1924 Paavo Nurmi, Finland.....	32m.54.8s.

Team Race

	Pts.
1900 Great Britain (5,000 meters).....	26
1904 United States (4 miles).....	27
1908 Great Britain (3 miles).....	6
1912 United States (3,000 meters).....	9
1920 United States (3,000 meters).....	10
1924 Finland (3,000 meters).....	9

Cross-Country Team Races

	Pts.
1912 Sweden (8,000 meters).....	10
1920 Finland (10,000 meters).....	10
1924 Finland (10,000 meters).....	11

1,500-Meter Walk

1906	George V. Bonhag, United States.....	7m.12.6s.
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3,000-Meter Walk

1920	Ugo Frigerio, Italy.....	13m.14.2s.
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3,500-Meter Walk

1908	George Larnar, Great Britain.....	14m.56s.
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10,000-Meter Walk

1912	George Goulding, Canada.....	46m.28.4s.
1920	Ugo Frigerio, Italy.....	48m.6.2s.
1924	Ugo Frigerio, Italy.....	47m.49s.
1948	John Mikaelsson, Sweden.....	45m.13.2s.
1952	John Mikaelsson, Sweden.....	45m.2.8s.

10-Mile Walk

1908	George Larnar, Great Britain.....	1h.15m.57.4s.
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20,000-Meter Walk

1956	Leonid Spirin, U.S.S.R.....	1h.31m.27s.
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50,000-Meter Walk

1932	Thomas W. Green, Great Britain.....	4h.50m.10s.
1936	Harold Whitlock, Great Britain.....	4h.30m.41.4s.
1948	John Ljunggren, Sweden.....	4h.41m.52s.
1952	Giuseppe Bordini, Italy.....	4h.28m.7.8s.
1956	Norman Read, New Zealand.....	4h.30m.42.8s.

400-Meter Relay (4 x 100)

1912	Great Britain.....	42.4s.
1920	United States.....	42.2s.
1924	United States.....	41s.
1928	United States.....	41s.
1932	United States.....	40s.
1936	United States.....	39.8s.
1948	United States.....	40.6s.
1952	United States.....	40.1s.
1956	United States.....	39.5s.

1,600-Meter Relay (200-200-400-800)

1908	United States.....	3m.27.2s.
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1,600-Meter Relay (4 x 400)

1912	United States.....	3m.16.6s.
1920	Great Britain.....	3m.22.2s.
1924	United States.....	3m.16s.
1928	United States.....	3m.14.2s.
1932	United States.....	3m.8.2s.
1936	Great Britain.....	3m.9s.
1948	United States.....	3m.10.4s.
1952	Jamaica, B. W. I.....	3m.3.9s.
1956	United States.....	3m.4.8s.

Pole Vault

1896	William Hoyt, United States.....	10 ft. 9½ in.
1900	Irving Baxter, United States.....	10 ft. 9.9 in.
1904	Charles Dvorak, United States.....	11 ft. 6 in.
1906	Fernand Gouder, France.....	11 ft. 6 in.
1908	A. C. Gilbert, United States, and Edward Cook, United States (tie).....	12 ft. 2 in.
1912	Harry Babcock, United States.....	12 ft. 11½ in.
1920	Frank Foss, United States.....	13 ft. 5 in.
1924	Lee Barnes, United States.....	12 ft. 11½ in.
1928	Sabin W. Carr, United States.....	13 ft. 9½ in.
1932	William Miller, United States.....	14 ft. 1½ in.
1936	Earle Meadows, United States.....	14 ft. 3¼ in.
1948	Guinn Smith, United States.....	14 ft. 1¼ in.
1952	Robert Richards, United States.....	14 ft. 11.14 in.
1956	Robert Richards, United States.....	14 ft. 11½ in.

Standing High Jump

1900	Ray Ewry, United States.....	5 ft. 5 in.
1904	Ray Ewry, United States.....	4 ft. 11 in.
1906	Ray Ewry, United States.....	5 ft. 1½ in.

1908	Ray Ewry, United States.....	5 ft. 2 in.
1912	Platt Adams, United States.....	5 ft. 4 in.

Running High Jump

1896	Ellery Clark, United States.....	5 ft. 7 in.
1900	Irving Baxter, United States.....	6 ft. 2 in.
1904	Samuel Jones, United States.....	5 ft. 7 in.
1906	Con Leahy, Ireland.....	5 ft. 8 in.
1908	Harry Porter, United States.....	6 ft. 1 in.
1912	Alma Richards, United States.....	6 ft. 1 in.
1920	Richard Landon, United States.....	6 ft. 1 in.
1924	Harold Osborn, United States.....	6 ft. 1 in.
1928	Robert W. King, United States.....	6 ft. 1 in.
1932	Duncan McNaughton, Canada.....	6 ft. 1 in.
1936	Cornelius Johnson, United States.....	6 ft. 1 in.
1948	John Winter, Australia.....	6 ft. 1 in.
1952	Walter Davis, United States.....	6 ft. 1 in.
1956	Charles Dumas, United States.....	6 ft. 1 in.

Standing Broad Jump

1900	Ray Ewry, United States.....	30 ft.
1904	Ray Ewry, United States.....	11 ft.
1906	Ray Ewry, United States.....	10 ft.
1908	Ray Ewry, United States.....	10 ft.
1912	Constantin Tscilitiras, Greece.....	11 ft.

Running Broad Jump

1896	Ellery Clark, United States.....	20 ft.
1900	Alvin Kraenzlein, United States.....	23 ft.
1904	Myer Prinstein, United States.....	24 ft.
1906	Myer Prinstein, United States.....	23 ft.
1908	Frank Irons, United States.....	24 ft.
1912	Albert Gutterson, United States.....	24 ft.
1920	Wm. Petterson, Sweden.....	23 ft.
1924	DeHart Hubbard, United States.....	24 ft.
1928	Edward B. Hamm, United States.....	25 ft.
1932	Edward Gordon, United States.....	25 ft.
1936	Jesse Owens, United States.....	26 ft. 1 in.
1948	Willie Steele, United States.....	25 ft.
1952	Jerome Biffle, United States.....	24 ft. 1 in.
1956	Gregory Bell, United States.....	25 ft. 8 in.

Standing Hop, Step and Jump

1900	Ray Ewry, United States.....	34 ft. 1 in.
1904	Ray Ewry, United States.....	34 ft. 1 in.

Running Hop, Step and Jump

1896	James B. Connolly, United States.....	45 ft.
1900	Myer Prinstein, United States.....	47 ft. 4 in.
1904	Myer Prinstein, United States.....	47 ft.
1906	P. G. O'Connor, Ireland.....	46 ft. 2 in.
1908	Timothy Ahearne, Great Britain.....	48 ft. 11 in.
1912	Gustaf Lindblom, Sweden.....	48 ft. 5 in.
1920	Vilho Tuulos, Finland.....	47 ft. 6 in.
1924	Archie Winter, Australia.....	50 ft. 1 in.
1928	Mikio Oda, Japan.....	49 ft. 10 in.
1932	Chuhei Nambu, Japan.....	51 ft. 7 in.
1936	Naoto Tajima, Japan.....	52 ft. 5 in.
1948	Arne Ahman, Sweden.....	50 ft. 6 in.
1952	Adhemar da Silva, Brazil.....	53 ft. 2½ in.
1956	Adhemar da Silva, Brazil.....	53 ft. 7½ in.

16-Lb. Shot Put

1896	Robert Garrett, United States.....	36 ft. 2 in.
1900	Richard Sheldon, United States.....	46 ft. 3 in.
1904	Ralph Rose, United States.....	48 ft. 7 in.
1906	Martin Sheridan, United States.....	40 ft. 4 in.
1908	Ralph Rose, United States.....	46 ft. 7 in.
1912	Pat McDonald, United States.....	50 ft. 4 in.
1920	Ville Porphola, Finland.....	48 ft. 7 in.
1924	Clarence Houser, United States.....	49 ft. 7 in.
1928	John Kuck, United States.....	52 ft. 1 in.
1932	Leo Sexton, United States.....	52 ft. 6 in.
1936	Hans Woellke, Germany.....	53 ft. 1 in.
1948	Wilbur Thompson, United States.....	56 ft. 2 in.
1952	Parry O'Brien, United States.....	57 ft. 1 in.
1956	Parry O'Brien, United States.....	60 ft. 1 in.

Lb. Shot Put (Both Hands)

h Rose, United States.....	90 ft. 5½ in.
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16-Lb. Hammer Throw

Flanagan, United States.....	167 ft. 4 in.
Flanagan, United States.....	168 ft. 1 in.
Flanagan, United States.....	170 ft. 4¼ in.
McGrath, United States.....	177 ft. 7 in.
yan, United States.....	173 ft. 5½ in.
Tootell, United States.....	174 ft. 10¼ in.
ck O'Callaghan, Ireland.....	168 ft. 7½ in.
ck O'Callaghan, Ireland.....	176 ft. 11½ in.
Hein, Germany.....	185 ft. 4 in.
Nemeth, Hungary.....	183 ft. 11½ in.
f Csermak, Hungary.....	197 ft. 11.67 in.
Connolly, United States.....	207 ft. 2¾ in.

56-Lb. Weight Throw

ne Desmarteau, Canada.....	34 ft. 4 in.
McDonald, United States.....	36 ft. 11½ in.

Discus Throw

rt Garrett, United States.....	95 ft. 7½ in.
f Bauer, Hungary.....	118 ft. 2.9 in.
n Sheridan, United States.....	128 ft. 10½ in.
n Sheridan, United States.....	136 ft. ¾ in.
n Sheridan, United States.....	134 ft. 2 in.
s Taipale, Finland.....	148 ft. 3.9 in.
Niklander, Finland.....	146 ft. 7 in.
nce Houser, United States.....	151 ft. 5¼ in.
nce Houser, United States.....	155 ft. 2¼ in.
Anderson, United States.....	162 ft. 4¼ in.
arpenter, United States.....	165 ft. 7¼ in.
o Consolini, Italy.....	173 ft. 2 in.
n Iness, United States.....	180 ft. 6.85 in.
rtter, United States.....	184 ft. 10½ in.

Discus Throw—Greek Style

er Jaervinen, Finland.....	115 ft. 4 in.
n Sheridan, United States.....	124 ft. 8 in.

Discus Throw (Both Hands)

s Taipale, Finland.....	271 ft. 10½ in.
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Javelin Throw

emming, Sweden.....	175 ft. 6 in.
emming, Sweden.....	179 ft. 10½ in.
emming, Sweden.....	198 ft. 11¼ in.
Myyra, Finland.....	215 ft. 9¼ in.
Myyra, Finland.....	206 ft. 6¼ in.
undquist, Sweden.....	218 ft. 6¼ in.
arvinen, Finland.....	238 ft. 7 in.
d Stoeck, Germany.....	235 ft. 8¼ in.
utavaara, Finland.....	228 ft. 10½ in.
ung, United States.....	242 ft. 0.79 in.
anielsen, Norway.....	281 ft. 2¼ in.

Javelin Throw—Free Style

emming, Sweden.....	178 ft. 7½ in.
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Javelin Throw (Both Hands)

Saaristo, Finland.....	358 ft. 11½ in.
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Rolling the Stone (14 lbs.)

Georgantas, Greece.....	65 ft. 4 1/5 in.
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Tug of War

States	1912 Sweden
ny	1920 Great Britain
Britain	

All-Around

s Kiely, Great Britain.....	6,036 pts.
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Pentathlon

1906 H. Mellander, Sweden.....	24 pts.
1912 Ferdinand Bie, Norway.....	21 pts.
1920 Eero Lehtonen, Finland.....	14 pts.
1924 Eero Lehtonen, Finland.....	16 pts.

Decathlon

1912 Hugo Wieslander, Sweden.....	7,724.495 pts.
1920 Helge Lovland, Norway.....	6,804.35 pts.
1924 Harold Osborn, United States.....	7,710.775 pts.
1928 Paavo Yrjola, Finland.....	8,053.29 pts.
1932 James Bausch, United States.....	8,462.23 pts.
1936 Glenn Morris, United States.....	7,900 pts.*
1948 Robert B. Mathias, United States.....	7,139 pts.
1952 Robert B. Mathias, United States.....	7,887 pts.†
1956 Milton Campbell, United States.....	7,937 pts.

* Point system revised. † Revised again.

TRACK AND FIELD—WOMEN**100-Meter Run**

1928 Elizabeth Robinson, United States.....	12.2s.
1932 Stella Walsh, Poland.....	11.9s.
1936 Helen Stephens, United States.....	11.5s.
1948 Fanny Blankers-Koen, Holland.....	11.9s.
1952 Marjorie Jackson, Australia.....	11.5s.
1956 Betty Cuthbert, Australia.....	11.5s.

200-Meter Run

1948 Fanny Blankers-Koen, Holland.....	24.4s.
1952 Marjorie Jackson, Australia.....	23.7s.
1956 Betty Cuthbert, Australia.....	23.4s.

800-Meter Run

1928 Lina Radke, Germany.....	2m.16.8s
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80-Meter Hurdles

1932 Mildred Didrikson, United States.....	11.7s.
1936 Trebisonda Valla, Italy.....	11.7s.
1948 Fanny Blankers-Koen, Holland.....	11.2s.
1952 Shirley S. de la Hunty, Australia.....	10.9s.
1956 Shirley S. de la Hunty, Australia.....	10.7s.

400-Meter Relay

1928 Canada.....	48.4s.
1932 United States.....	47s.
1936 United States.....	46.9s.
1948 Holland.....	47.5s.
1952 United States.....	45.9s.
1956 Australia.....	44.5s.

Running High Jump

1928 Ethel Catherwood, Canada.....	5 ft. 3 in.
1932 Jean Shiley, United States.....	5 ft. 5¼ in.
1936 Ibolya Csak, Hungary.....	5 ft. 3 in.
1948 Alice Coachman, United States.....	5 ft. 6¼ in.
1952 Ester Brand, South Africa.....	5 ft. 5.75 in.
1956 Mildred McDaniel, United States.....	5 ft. 9¼ in.

Running Broad Jump

1948 Olga Gyarmati, Hungary.....	18 ft. 8¼ in.
1952 Yvette Williams, New Zealand.....	20 ft. 5.66 in.
1956 Elzbieta Kzesinska, Poland.....	20 ft. 10 in.

Discus Throw

1928 Helena Konopacka, Poland.....	129 ft. 11½ in.
1932 Lillian Copeland, United States.....	133 ft. 2 in.
1936 Gisela Mauermayer, Germany.....	156 ft. 3¾ in.
1948 Micheline Ostermeyer, France.....	137 ft. 6½ in.
1952 Nina Romaschkova, U.S.S.R.....	168 ft. 8.5 in.
1956 Olga Fikotova, Czechoslovakia.....	176 ft. 1½ in.

Javelin Throw

1932	Mildred Didrikson, United States.....	143 ft. 4 in.
1936	Tilly Fleischer, Germany.....	148 ft. 2½ in.
1948	Herma Bauma, Austria.....	149 ft. 6 in.
1952	Dana Zatopek, Czechoslovakia.....	165 ft. 7.05 in.
1956	Inessa Janzeme, U.S.S.R.....	176 ft. 8½ in.

Shot Put

1948	Micheline Ostermeyer, France.....	45 ft. 1½ in.
1952	Galina Zybina, U.S.S.R.....	50 ft. 2.58 in.
1956	Tamara Tishkevich, U.S.S.R.....	54 ft. 5 in.

SWIMMING—MEN**50 Yards**

1904	Zoltan de Halmay, Hungary.....	28s.
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100 Meters

1896	Alfred Hajos, Hungary.....	1m.22.2s.
1904	Zoltan de Halmay, Hungary.....	1m.2.58.*
1906	Charles Daniels, United States.....	1m.13s.
1908	Charles Daniels, United States.....	1m.5.6s.
1912	Duke P. Kahanamoku, United States.....	1m.3.4s.
1920	Duke P. Kahanamoku, United States.....	1m.1.4s.
1924	John Weissmuller, United States.....	59s.
1928	John Weissmuller, United States.....	58.6s.
1932	Yasuji Miyazaki, Japan.....	58.2s.
1936	Ferenc Csik, Hungary.....	57.6s.
1948	Walter Ris, United States.....	57.3s.
1952	Clarke Scholes, United States.....	57.4s.
1956	Jon Henricks, Australia.....	55.4s.

* 100 yards.

200 Meters

1900	Frederick Lane, Australia.....	2m.25.2s.
1904	Charles Daniels, United States.....	2m.44.2s.*

* 220 yards.

400 Meters

1896	Paul Neumann, Austria.....	8m.12.6s.*
1904	Charles Daniels, United States.....	6m.16.2s.†
1906	Otto Sheff, Austria.....	6m.23.8s.
1908	Henry Taylor, Great Britain.....	5m.36.8s.
1912	George Hodgson, Canada.....	5m.24.4s.
1920	Norman Ross, United States.....	5m.26.8s.
1924	John Weissmuller, United States.....	5m.4.2s.
1928	Albert Zorilla, Argentina.....	5m.1.6s.
1932	Clarence Crabbe, United States.....	4m.48.4s.
1936	Jack Medica, United States.....	4m.44.5s.
1948	William Smith, United States.....	4m.41s.
1952	Jean Boiteux, France.....	4m.30.7s.
1956	Murray Rose, Australia.....	4m.27.3s.

* 500 meters. † 440 yards.

880 Yards

1904	Emil Rausch, Germany.....	13m.11.4s.
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1,000 Meters

1900	John Jarvis, Great Britain.....	13m.40.2s.
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1,200 Meters

1896	Alfred Hajos, Hungary.....	18m.22.2s.
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1,500 Meters

1904	Emil Rausch, Germany.....	27m.18.2s.*
1906	Henry Taylor, Great Britain.....	28m.28s.†
1908	Henry Taylor, Great Britain.....	22m.48.4s.
1912	George Hodgson, Canada.....	22m.
1920	Norman Ross, United States.....	22m.23.2s.
1924	Andrew Charlton, Australia.....	20m.6.6s.
1928	Arne Borg, Sweden.....	19m.51.8s.
1932	Kusuo Kitamura, Japan.....	19m.12.4s.
1936	Noboru Terada, Japan.....	19m.13.7s.
1948	James McLane, United States.....	19m.18.5s.
1952	Ford Konno, United States.....	18m.30s.
1956	Murray Rose, Australia.....	17m.58.9s.

* One mile. † 1,600 meters.

4,000 Meters

1896	John Jarvis, Great Britain.....	58m.2s.
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Relays

1900	Germany (200 meters, 5 men).....	32 m.
1904	United States (200 yards).....	2m.4s.
1906	Hungary (1,000 meters).....	16m.5s.

800-Meter Relay

1908	Great Britain.....	10m.
1912	Australasia.....	10m.
1920	United States.....	10m.
1924	United States.....	9m.
1928	United States.....	9m.
1932	Japan.....	8m.
1936	Japan.....	8m.
1948	United States.....	8m.
1952	United States.....	8m.
1956	Australia.....	8m.

100-Meter Backstroke

1900	Ernst Hoppenberg, Germany.....	2m.
1904	Walter Brack, Germany.....	1m.
1908	Arno Bieberstein, Germany.....	1m.
1912	Harry Hebner, United States.....	1m.
1920	Warren Kealoha, United States.....	1m.
1924	Warren Kealoha, United States.....	1m.
1928	George Kojac, United States.....	1m.
1932	Masaji Kiyokawa, Japan.....	1m.
1936	Adolph Kiefer, United States.....	1m.
1948	Allen Stack, United States.....	1m.
1952	Yoshinobu Oyakawa, United States.....	1m.
1956	David Thiele, Australia.....	1m.

* 200 meters. † 100 yards.

200-Meter Butterfly

1956	Bill Yorzyk, United States.....	2m.
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200-Meter Breast Stroke

1908	Frederick Holman, Great Britain.....	3m.9s.
1912	Walter Bathe, Germany.....	3m.11s.
1920	Haken Malmroth, Sweden.....	3m.4s.
1924	Robert Skelton, United States.....	2m.5s.
1928	Yoshiyuki Tsuruta, Japan.....	2m.4s.
1932	Yoshiyuki Tsuruta, Japan.....	2m.4s.
1936	Tetsuo Hamuro, Japan.....	2m.4s.
1948	Joseph Verdeur, United States.....	2m.3s.
1952	John Davies, Australia.....	2m.3s.
1956	Masura Furukawa, Japan.....	2m.3s.

400-Meter Breast Stroke

1904	Georg Zacharias, Germany.....	7m.23s.
1912	Walter Bathe, Germany.....	6m.22s.
1920	Haken Malmroth, Sweden.....	6m.31s.

* 440 yards.

60-Meter Underwater

1900	de Vaudeville, France.....	1m.5s.
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200-Meter Obstacle

1900	Frederick Lane, Australia.....	2m.38s.
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Springboard Dive

1908	Albert Zuercher, Germany.....	1m.
1912	Paul Guenther, Germany.....	1m.
1920	Louis Kuehn, United States.....	1m.
1924	Albert White, United States.....	1m.
1928	Pete Desjardins, United States.....	1m.
1932	Michael Galitzen, United States.....	1m.
1936	Richard Degener, United States.....	1m.
1948	Bruce Harlan, United States.....	1m.
1952	David Browning, United States.....	1m.
1956	Robert Clotworthy, United States.....	1m.

(See Index for 1960 Olympic results.)

High Dive

	Points
Sheldon, United States.....	12.75
b Walz, Germany.....	156
ar Johansson, Sweden.....	83.75
adlerz, Sweden.....	73.94
nce Pinkston, United States.....	7
t White, United States.....	487.3
Desjardins, United States.....	98.74
d Smith, United States.....	124.80
all Wayne, United States.....	113.58
el Lee, United States.....	130.05
el Lee, United States.....	156.28
in Capilla, Mexico.....	152.44

Plain High Dive

	Points
adlerz, Sweden.....	40
Wallman, Sweden.....	7
d Eve, Australia.....	160

Plunge for Distance

Dickey, United States.....	62 ft. 6 in.
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WATER POLO

Britain.....	1928	Germany
States.....	1932	Hungary
Britain.....	1936	Hungary
Britain.....	1948	Italy
Britain.....	1952	Hungary
.....	1956	Hungary

WIMMING—WOMEN

100 Meters

Durack, Australia.....	1m.22.2s.
a Bleibtrey, United States.....	1m.13.6s.
ackie, United States.....	1m.12.4s.
Osipowich, United States.....	1m.11s.
Madison, United States.....	1m.6.8s.
ka Mastenbroek, Holland.....	1m.5.9s.
Andersen, Denmark.....	1m.6.3s.
Szoke, Hungary.....	1m.6.8s.
Fraser, Australia.....	1m.2s.

400 Meters

a Bleibtrey, United States.....	4m.34s.*
a Norelius, United States.....	6m.2.2s..
a Norelius, United States.....	5m.42.8s.
Madison, United States.....	5m.28.5s.
ka Mastenbroek, Holland.....	5m.26.4s.
urtis, United States.....	5m.17.8s.
gyenge, Hungary.....	5m.12.1s.
ne Crapp, Australia.....	4m.54.6s.

ers.

400-Meter Relay

Britain.....	5m.52.8s.
States.....	5m.11.6s.
States.....	4m.58.8s.
States.....	4m.47.6s.
States.....	4m.38s.
.....	4m.36s.
States.....	4m.29.2s.
y.....	4m.24.4s.
ia.....	4m.17.1s.

100-Meter Backstroke

auer, United States.....	1m.23.2s.
Braun, Holland.....	1m.22s.
Holm, United States.....	1m.19.4s.
nnf, Holland.....	1m.18.9s.
larup, Denmark.....	1m.14.4s.
arrison, South Africa.....	1m.14.3s.
inham, Great Britain.....	1m.12.9s.

100-Meter Butterfly

1956	Shelley Mann, United States.....	1m.11s.
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200-Meter Breast Stroke

1924	Lucy Morton, Great Britain.....	3m.33.2s.
1928	Hilde Schrader, Germany.....	3m.12.6s.
1932	Clare Dennis, Australia.....	3m.6.3s.
1936	Hideko Maehata, Japan.....	3m.3.6s.
1948	Nel van Vliet, Holland.....	2m.57.2s.
1952	Eva Szekely, Hungary.....	2m.51.7s.
1956	Ursula Happe, Germany.....	2m.53.1s.

Springboard Dive

	Points
1920 Aileen Riffin, United States.....	9
1924 Elizabeth Becker, United States.....	474.5
1928 Helen Meany, United States.....	78.62
1932 Georgia Coleman, United States.....	87.52
1936 Marjorie Gestring, United States.....	89.27
1948 Victoria M. Draves, United States.....	108.74
1952 Mrs. Patricia McCormick, United States.....	147.30
1956 Mrs. Patricia McCormick, United States.....	142.36

High Dive

	Points
1912 Greta Johansson, Sweden	39.9
1920 Stefani Fryland, Denmark	6
1924 Caroline Smith, United States	166
1928 Elizabeth B. Pinkston, United States	31.60
1932 Dorothy Poynton, United States	40.26
1936 Mrs. Dorothy Poynton Hill, United States	33.93
1948 Victoria M. Draves, United States	68.87
1952 Mrs. Patricia McCormick, United States	79.37
1956 Mrs. Patricia McCormick, United States	84.85

BOXING

Flyweight

1904	George V. Finnegan, United States
1920	Frank De Genaro, United States
1924	Fidel La Barba, United States
1928	Anton Kocsis, Hungary
1932	Stephen Enekes, Hungary
1936	Willi Kaiser, Germany
1948	Pascual Perez, Argentina
1952	Nate Brooks, United States
1956	Terence Spinks, Great Britain

Bantamweight

1904	O. L. Kirk, United States
1908	H. Thomas, Great Britain
1920	Clarence Walker, South Africa
1924	William Smith, South Africa
1928	Vittorio Tamagnini, Italy
1932	Horace Gwynne, Canada
1936	Ulderico Sergio, Italy
1948	Tibor Csik, Hungary
1952	Pentti Hamalainen, Finland
1956	Wolfgang Behrendt, Germany

Featherweight

1904	O. L. Kirk, United States
1908	R. K. Gunn, Great Britain
1920	Paul Fritsch, France
1924	Jackie Fields, United States
1928	L. Van Klaveren, Holland
1932	Carmelo A. Robledo, Argentina
1936	Oscar Casanovas, Argentina
1948	Ernesto Formenti, Italy
1952	Jan Zachara, Czechoslovakia
1956	Vladimir Safronov, U.S.S.R.

Lightweight

1904	H. J. Spanger, United States
1908	F. Grace, Great Britain
1920	Samuel Mosberg, United States
1924	Harold Nielsen, Denmark
1928	Carlo Orlandi, Italy
1932	Lawrence Stevens, South Africa
1936	Imre Harangi, Hungary
1948	Gerry Dreyer, South Africa
1952	Aureliano Bolognesi, Italy
1956	Richard McTaggart, Great Britain

Light Welterweight

1952	Charles Adkins, United States
1956	Vladimir Enguibarjan, U.S.S.R.

Welterweight

1904	Al Young, United States
1920	T. Schneider, Canada
1924	Jean Delarge, Belgium
1928	Edward Morgan, New Zealand
1932	Edward Flynn, United States
1936	Sten Suvio, Finland
1948	Julius Torma, Czechoslovakia
1952	Zygmunt Chycha, Poland
1956	Necolae Linca, Rumania

Light Middleweight

1952	Laszlo Papp, Hungary
1956	Laszlo Papp, Hungary

Middleweight

1904	Charles Mayer, United States
1908	John Douglas, Great Britain
1920	Harry Mallin, Great Britain
1924	Harry Mallin, Great Britain
1928	Pietro Toscani, Italy
1932	Carmen Barth, United States
1936	Jean Despeaux, France
1948	Laszlo Papp, Hungary
1952	Floyd Patterson, United States
1956	Guenadii Chatkov, U.S.S.R.

Light Heavyweight

1920	Edward Eagan, United States
1924	Harry Mitchell, Great Britain
1928	Victorio Avendano, Argentina
1932	David E. Carstens, South Africa
1936	Roger Michlot, France
1948	George Hunter, South Africa
1952	Norvel Lee, United States
1956	James Boyd, United States

Heavyweight

1904	Sam Berger, United States
1908	A. L. Oldham, Great Britain
1920	R. Rawson, Great Britain
1924	Otto von Porat, Norway
1928	A. Rodriguez Jurado, Argentina
1932	Santiago A. Lovell, Argentina
1936	Herbert Runge, Germany
1948	Rafael Iglesias, Argentina
1952	Edward Sanders, United States
1956	Peter Rademacher, United States

FIGURE SKATING**Men**

	Points
1908	Ulrich Salchow, Sweden..... 377.3
1920	Gillis Grafstrom, Sweden..... 405.5
1924	Gillis Grafstrom, Sweden..... 367.89
1928	Gillis Grafstrom, Sweden..... 385.77

1932	Karl Schaefer, Austria.....
1936	Karl Schaefer, Austria.....
1948	Richard Button, United States.....
1952	Richard Button, United States.....
1956	Hayes Alan Jenkins, United States.....

Women

1908	Mrs. Madge Syers, Great Britain.....
1920	Magda Mauroy, Sweden.....
1924	Mrs. Herma Szabo-Planck, Austria.....
1928	Sonja Henie, Norway.....
1932	Sonja Henie, Norway.....
1936	Sonja Henie, Norway.....
1948	Barbara Ann Scott, Canada.....
1952	Jeannette Altwegg, Great Britain.....
1956	Tenley Albright, United States.....

Pairs

1908	Alma Huber-Heinrich Burger, Germany.....
1920	Ludovika and Walter Jacobsson, Finland.....
1924	Helene Englemann-Alfred Berger, Austria.....
1928	Andree Joly-Pierre Brunet, France.....
1932	Andree and Pierre Brunet, France.....
1936	Maxie Herber-Ernst Baier, Germany.....
1948	Micheline Lannoy-Pierre Baughniet, Belgium.....
1952	Ria and Paul Falk, Germany.....
1956	Elisabeth Schwarz-Kurt Oppelt, Austria.....

Special Figures

1908	Nikolai Panin, Russia.....
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SPEED SKATING**500 Meters**

1924	Charles Jewtraw, United States.....
1928	Clas Thunberg, Finland, and Bernt Even- sen, Norway (tie).....
1932	John Shea, United States.....
1936	Ivar Ballangrud, Norway.....
1948	Finn Helgesen, Norway.....
1952	Ken Henry, United States.....
1956	Eugeny Grishin, U.S.S.R.....

1,500 Meters

1924	Clas Thunberg, Finland..... 2m
1928	Clas Thunberg, Finland..... 2m
1932	John Shea, United States..... 2m
1936	Charles Mathisen, Norway..... 2m
1948	Sverre Farstad, Norway..... 2m
1952	Hjalmar Andersen, Norway..... 2m
1956	Eugeny Grishin, U.S.S.R., and Yuri Mik- hailov, U.S.S.R. (tie)..... 2m

5,000 Meters

1924	Clas Thunberg, Finland..... 8m
1928	Ivar Ballangrud, Norway..... 8m
1932	Irving Jaffee, United States..... 9m
1936	Ivar Ballangrud, Norway..... 8m
1948	Reidar Liakley, Norway..... 8m
1952	Hjalmar Andersen, Norway..... 8m
1956	Boris Shilov, U.S.S.R..... 7m

10,000 Meters

1924	Julien Skutnabb, Finland..... 18m
1928	*Irving Jaffee, United States..... 18m
1932	Irving Jaffee, United States..... 19m
1936	Ivar Ballangrud, Norway..... 17m
1948	Ake Seyffarth, Sweden..... 17m
1952	Hjalmar Andersen, Norway..... 16m
1956	Sigvard Ericsson, Sweden..... 16m

* Thaw caused cancellation of event. Jaffee had time.

Combined

1924	Clas Thunberg, Finland.....
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(See Index for 1960 Olympic Results)

1959 PAN-AMERICAN GAMES CHAMPIONS

BOXING

Miguel Botta, Argentina
Valdo Claudiano, Brazil
Carlos Aro, Argentina
Abel Laudonio, Argentina
Vincent Shomo, U. S.
Alfredo Cornejo, Chile
Gilbert McClure, U. S.
Aldo de Souza, Brazil
Tommy Johnson, U. S.
Ally—Allen Hudson, U. S.

CYCLING

Print—Juan Canto, Argentina
Time trial—Anezio Argenta, Argentina

Ricardo Senn, Argentina
Team—Argentina

EQUESTRIAN

Trish Galvin, U. S.
Team—Chile
Michael Page, U. S.
Team—Canada
Team—United States

FENCING

Goldsmith, U. S.
United States
Wommack, U. S.
United States
Kwartler, U. S.
United States
Maria Roldan, Mexico

GYMNASTICS

John Beckner, U. S.
Team—United States
John Beckner, U. S.
John Beckner, U. S.
Abe Grossfeld, U. S.
Abe Grossfeld, U. S.
Abe Grossfeld, U. S., Jamile
U. S. (tie)
Gregor Weiss, U. S.
Harold Holmes, U. S.
Francisco Alvarez, Mexico
Ron Munn, U. S.
Garvin Smith, U. S.

WOMEN

Ernestine Russell, Canada
Team—United States
Ernestine Russell, Canada
Ernestine Russell,
Parallel bars—Ernestine Russell,

Theresa Montefusco, U. S.

PENTATHLON

Wenceslaus Malta, Brazil
United States

ROWING

United States
United States
Oxswain—United States
(Robert Rogers, Ted Frost)
Oxswain—Uruguay (Gustavo
Aguiar, Raul Torrieri)
S. (Jack Kelly, Jr., Bill
Parker, U. S.

SHOOTING

English match—Arthur Cook, U. S.
English match, team—United States
Skeet—Gilberto Navarro, Chile
Skeet, team—United States
Free pistol—Nelson Lincoln, U. S.
Free pistol, team—United States
Center-fire pistol—Aubrey Smith, U. S.
Center-fire pistol, team—United States
Smallbore pistol, rapid fire—David
Cartes, U. S.
Smallbore pistol, rapid fire, team—
U. S.

SMALLBORE RIFLE

Overall—Daniel Puckel, U. S.
Overall, team—United States
Prone—Gerald Ouelette, Canada
Prone, team—Canada
Kneeling—James Carter, U. S.
Kneeling, team—United States
Standing—James Carter, U. S.
Standing, team—United States

FREE RIFLE

Overall—Daniel Puckel, U. S.
Overall, team—United States
Prone—Daniel Puckel, U. S.
Kneeling—Daniel Puckel, U. S.
Standing—Daniel Puckel, U. S.

FREE RIFLE, RAPID FIRE

Overall—Daniel Puckel, U. S.
Overall, team—United States
Prone—Tommy Pool, U. S.
Kneeling—Daniel Puckel, U. S.

SWIMMING

100-m. free—Jeff Farrell, U. S.
400-m. free—George Breen, U. S.
1,500-m. free—Alan Somers, U. S.
100-m. back—Frank McKinney, U. S.
200-m. breast—Bill Mullikan, U. S.
200-m. butterfly—Dave Gillanders, U. S.
800-m. freestyle relay—United States
400-m. medley relay—United States
3-m. springboard dive—Gary Tobian,
U. S.
Platform dive—Alvaro Gaxiola, U. S.

WOMEN

100-m. free—Chris von Saltza, U. S.
200-m. free—Chris von Saltza, U. S.
400-m. free—Chris von Saltza, U. S.
100-m. back—Carin Cone, U. S.
200-m. breast—Ann Warner, U. S.
100-m. butterfly—Becky Collins, U. S.
400-m. freestyle relay—United States
400-m. medley relay—United States
Springboard dive—Paula Myers Pope,
U. S.
Platform dive—Paula Myers Pope, U. S.

TENNIS

Singles—Luis Ayala, Chile
Doubles—Gustavo and Antonio Palafox,
Mexico
Women's singles—Althea Gibson, U. S.
Women's doubles—Yola Ramirez-Rosa
Maria Reyes, Mexico
Mixed doubles—Yola Ramirez-Gustavo
Ramirez, Mexico

TRACK AND FIELD

100 m.—Ray Norton, U. S.
200 m.—Ray Norton, U. S.
400 m.—George Kerr, West Indies
800 m.—Tom Murphy, U. S.
1,500 m.—Dyrol Burleson, U. S.
5,000 m.—Bill Dellinger, U. S.
10,000 m.—Osvaldo Suarez, Argentina
Marathon—John J. Kelley, U. S.
3,000-m. stpichse.—Phil Coleman, U. S.
110-m. high hurdles—Hayes Jones, U. S.
400-m. hurdles—Josh Culbreath, U. S.
400-m. relay—United States
1,600-m. relay—West Indies
High jump—Charles Dumas, U. S.
Broad jump—Irvin Roberson, U. S.
Hop, step & jump—A. F. da Silva, Brazil
Pole vault—Don Bragg, U. S.
Shot put—Parry O'Brien, U. S.
Discus—Al Oster, U. S.
Javelin—Buster Quist, U. S.
Hammer—Al Hall, U. S.
Decathlon—Dave Edstrom, U. S.

WOMEN

60 m.—Isabelle Daniels, U. S.
100 m.—Lucinda Williams, U. S.
200 m.—Lucinda Williams, U. S.
80-m. hurdles—Bertha Diaz, Cuba
400-m. relay—United States
High jump—Ann Flynn, U. S.
Broad jump—Anna Smith, U. S.
Shot put—Earlene Brown, U. S.
Discus—Earlene Brown, U. S.
Javelin—Marlene Ahrens, Chile

WEIGHTLIFTING

123-lb.—Chuck Vinci, U. S.
132-lb.—Isaac Berger, U. S.
148-lb.—Juan Torres, Cuba
165-lb.—Tommy Kono, U. S.
181-lb.—Jim George, U. S.
198-lb.—Clyde Emrich, U. S.
Heavyweight—Dave Ashman, U. S.

WRESTLING

114.5-lb.—Dick Wilson, U. S.
125.5-lb.—Dave Auble, U. S.
136.5-lb.—Lou Giani, U. S.
147.5-lb.—Jim Burke, U. S.
160.5-lb.—Doug Blubaugh, U. S.
174.5-lb.—Jim Ferguson, U. S.
191-lb.—Frank Rosenmayr, U. S.
Heavyweight—Dale Lewis, U. S.

YACHTING

Dragon—Jorge Salas, Argentina
Finn monotype—Kenneth Albury,
Bahamas
5.5-meter—George O'Day, U. S.
Flying Dutchman—Harry Sindle, U. S.
Lightning—E. Schmidt, Brazil
Snipe—Antonio Moraes, Brazil
Star—Durwood Knowles, Bahamas

OTHER TEAM SPORTS

Baseball—Venezuela
Basketball—United States
Basketball, women—United States
Soccer—Argentina
Volleyball—United States
Volleyball, women—Brazil
Water Polo—United States

BOWLING

THE GAME of bowling that is the favorite sport of millions of "keglers" in the United States is an indoor development of the more ancient outdoor game that survives as lawn bowling. The outdoor game is prehistoric in origin and probably goes back to Primitive Man and round stones that were rolled at some target. It is believed that a game something like nine-pins was popular among the Dutch, Swiss and Germans as long ago as A.D. 1200 at which time the game was played outdoors with an alley consisting of a single plank 12 to 18 inches wide along which was rolled a ball toward three rows of three pins each placed at the far end of the alley. When the first indoor alleys were built and how the game was modified from time to time are matters of dispute. Much of the confusion arises from a lack of certainty as to which game is meant, "bowls" or "bowling," one with a "jack" and the other with "pins," in historical passages.

It is supposed that the early settlers in New Amsterdam (New York City) Dutch, they brought their two ball games with them. About a century ago game of nine-pins was flourishing in the United States but so corrupted by betting on matches that it was barred by law in New York and Connecticut. The law specifically barred "nine-pin" and thus legally making it a new game. The genius who thought up that method of outwitting the law and put a popular game in motion once more remained modestly anonymous. With the increase in the number of pins, the diamond formation of nine-pins was abandoned for the triangle set-up of ten pins that remains the rule to this day. Various organizations were formed to make rules for bowling and supervise competition in the United States but none was successful until the American Bowling Congress, organized Sept. 9, 1895, became the ruling

American Bowling Congress Tournament Records

Source: Ed Marcou, American Bowling Congress.

Type of record	Holder and home city	Score
High team total.....	Pfeiffer Beer, Detroit.....	3243
High team game.....	Falstaff Beer, San Antonio, Texas.....	1226
High doubles total.....	Steve Nagy-John Klares, Cleveland.....	1453
High doubles game.....	John Gworek-Henry Kmidowski, Buffalo.....	544
High singles total.....	Lee Jouglaard, Detroit.....	775
High all events total.....	Ed Lubanski, Detroit.....	2116
High 3 games in any event.....	Lee Jouglaard, Detroit.....	775

AMERICAN BOWLING CONGRESS CHAMPIONS

SINGLES

Year	Score	Year	Score
1901 Frank Brill, Chicago.....	648	1930 Larry Shotwell, Covington, Ky.....	
1902 Fred Strong, Chicago.....	649	1931 Walter Lachowski, Erie, Pa.....	
1903 Dan A. Jones, Milwaukee.....	683	1932 Otto Nitschke, Cleveland.....	
1904 Martin Kern, St. Louis.....	647	1933 Earl Hewitt, Erie, Pa.....	
1905 C. M. Anderson, St. Paul, Minn.....	651	1934 Jerry Vidro, Grand Rapids, Mich.....	
1906 Frank J. Favour, Oshkosh, Wis.....	669	1935 Don Brokaw, Canton, Ohio.....	
1907 M. T. Levey, Indianapolis.....	*624	1936 Charles Warren, Springfield, Ill.....	
1908 Archie Wengler, Chicago.....	699	1937 Gene Gagliardi, Mt. Vernon, N. Y.....	
1909 Larry Sutton, Rochester, N. Y.....	*691	1938 Knute Anderson, Moline, Ill.....	
1910 Thomas Haley, Detroit.....	705	1939 Jim Danek, Forest Park, Ill.....	
1911 James Blouin, Chicago.....	681	1940 Ray Brown, Terre Haute, Ind.....	
1912 Larry Sutton, Rochester, N. Y.....	679	1941 Fred Ruff, Belleville, Ill.....	
1913 F. Peterson, Columbus, Ohio.....	693	1942 John Stanley, Cleveland.....	
1914 William Miller, Detroit.....	675	1946 Lee Rollick, Los Angeles.....	
1915 Wallace Pierce, Pueblo, Colo.....	711	1947 Junie McMahon, Chicago.....	
1916 Sam Schliman, Toronto.....	*685	1948 Lincoln Protich, Akron, Ohio.....	
1917 Otto Kallusch, Rochester, N. Y.....	698	1949 Bernard Rusche, St. Bernard, Ohio.....	
1918 C. Styles, Detroit.....	702	1950 Everett Leins, Aurora, Ill.....	
1919 Harry Cavan, Pittsburgh.....	718	1951 Lee Jouglaard, Detroit.....	
1920 Joe Shaw, Chicago.....	713	1952 Al Sharkey, Chicago.....	
1921 F. Smith, Detroit.....	702	1953 Frank Santore, Long Island City, N. Y.....	
1922 Walter Lundgren, Chicago.....	729	1954 Tony Sparando, Rego Park, N. Y.....	
1923 Carl Baumgartner, Cincinnati.....	724	1955 Eddie Gerzine, Milwaukee.....	
1924 Harry E. Snyders, Pittsburgh.....	749	1956 George Wade, Steubenville, Ohio.....	
1925 Al Green, Chicago.....	706	1957 Bob Allen, Yonkers, N. Y.....	
1926 Ed Votal, Braddock, Pa.....	731	1958 Ed Shay, Chester, Pa.....	
1927 William Eggers, Chicago.....	706	1959 Ed Lubanski, Detroit.....	
1928 Henry Summers, St. Louis.....	705		
1929 Adolphe Unke, Milwaukee.....	728		

* Won roll-off.

American Bowling Congress Champions (cont.)

ALL-EVENTS

	Score	Year		Score
Brill, Chicago	1736	1929	Otto Stein, Jr., St. Louis	1974
Koster, New York	1841	1930	George Morrison, Chicago	1985
Strong, Chicago	1896	1931	Michael Mauser, Youngstown, Ohio	1966
Kern, St. Louis	1804	1932	Hugh Stewart, Cincinnati	1980
Reilly, Chicago	1791	1933	Gilbert Zunker, Milwaukee	2060
Peacock, Indianapolis	1794	1934	Walt Reppenhagen, Detroit	1972
Ellis, Grand Rapids, Mich.	1775	1935	Ora Mayer, San Francisco	2022
Crable, E. Liverpool, Ohio	1924	1936	John Murphy, Indianapolis	2006
Blouin, Chicago	1885	1937	Max Stein, Belleville, Ill.	2070
Haley, Detroit	1961	1938	Don Beatty, Jackson, Mich.	1978
Smith, Buffalo, N. Y.	1919	1939	Joe Wilman, Chicago	2028
utton, Louisville, Ky.	1843	1940	Fred Fisher, Buffalo, N. Y.	2001
mann, Cleveland	1972	1941	Harold Kelly, South Bend, Ind.	2013
n Miller, Detroit	1897	1942	Stan Moskal, Saginaw, Mich.	1973
E. Faetz, Chicago	1876	1946	Joe Wilman, Chicago	2054
Thoma, Chicago	1919	1947	Junie McMahon, Chicago	1965
er, Detroit	1945	1948	Ned Day, West Allis, Wis.	1979
Steers, Chicago	1959	1949	John Small, Chicago	1941
indsey, New Haven, Conn.	1933	1950	Frank Santore, Long Island City, N. Y.	1981
Smith, Milwaukee	1915	1951	Tony Lindeman, Detroit	2005
nieman, Rochester, N. Y.	1909	1952	Steve Nagy, Cleveland	2065
Spinella, Brooklyn, N. Y.	1999	1953	Frank Santore, Long Island City, N. Y.	1994
n J. Knox, Philadelphia	2019	1954	Brad Lewis, Ashland, Ohio	1985
Veber, Elizabeth, N. J.	1975	1955	Fred Bujack, Detroit	1993
ce Long, Buffalo, N. Y.	1977	1956	Bill Lillard, Chicago	2018
Gerloski, Detroit	1981	1957	Jim Spalding, Louisville, Ky.	2088
Spinella, Brooklyn, N. Y.	2014	1958	Al Faragalli, Paterson, N. J.	2043
loff, Chicago	1937	1959	Ed Lubanski, Detroit	2116

NATIONAL MATCH GAME CHAMPIONS

Tournaments Conducted by Bowling Proprietors Association of America

Source: Bob Buchanan, Public Relations Director, BPAA

SINGLES

n Crimmins, Detroit	1950-51	Dick Hoover, Akron, Ohio
nie Schwoegler, Madison, Wis.	1951-52	Junie McMahon, Fair Lawn, N. J.
Day, Milwaukee	1952-53	Don Carter, St. Louis
dy Bomar, Chicago	1953-54	Don Carter, St. Louis
Wilman, Chicago	1954-55	Steve Nagy, Cleveland
y Varipapa, Hempstead, N. Y.	1955-56	Bill Lillard, Chicago
y Varipapa, Hempstead, N. Y.	1956-57	Don Carter, St. Louis
nie Schwoegler, Madison, Wis.	1957-58	Don Carter, St. Louis
e McMahon, Fair Lawn, N. J.	1958-59	Billy Welu, St. Louis

WOMEN'S INTERNATIONAL BOWLING CONGRESS CHAMPIONS

Source: Eleanor Debus, Director of Public Relations, WIBC

SINGLES

	Score	Year		Score
Steib, Detroit	537	1938	Mrs. Rose Warner, Waukegan, Ill.	622
Littlefield, Newark, N. J.	594	1939	Helen Hengstler, Detroit	626
Humphreys, St. Louis	559	1940	Mrs. Sally Twyford, Aurora, Ill.	626
ma Jaeger, Toledo, Ohio	579	1941	Nancy Huff, Los Angeles	662
ma Jaeger, Toledo, Ohio	603	1942	Tillie Taylor, Newark, N. J.	659
ma Jaeger, Toledo, Ohio	594	1946	Val Mikiel, Detroit	682
eney, Indianapolis	593	1947	Agnes Junker, Indianapolis	650
Reich, Chicago	622	1948	Shirlee Wernecke, Chicago	696
Weismann, Indianapolis	579	1949	Mrs. Clara Mataya, St. Louis	658
Chrhart, Akron, Ohio	577	1950	Cleo Stallkamp, Newport, Ky.	669
mp, Ft. Wayne, Ind.	622	1951	Ida Simpson, Buffalo, N. Y.	639
es Higgins, Chicago	637	1952	Lorene Craig, Kansas City, Mo.	672
mp, Ft. Wayne, Ind.	613	1953	Marge Baginski, Berwyn, Ill.	637
tle Schulte, St. Louis	650	1954	Helen Martin, Peoria, Ill.	668
McVay, Kansas City, Mo.	668	1955	Nellie Vella, Rockford, Ill.	695
y Twyford, Aurora, Ill.	628	1956	Lucille Noe, Columbus, Ohio	708
emensen, Chicago	712	1957	Eleanor Towles, Peoria, Ill.	664
armbirer, Chicago	652	1958	Ruth Hertel, Lexington, Tenn.	622
Burmeister, Madison, Wis.	612	1959	Mrs. Mae Ploegman Bolt, Chicago	664
a Gottstine, Buffalo, N. Y.	647			

Women's International Bowling Congress Champions (cont.)

ALL-EVENTS

Year		Score	Year		Score
1918	Mrs. Emma Jaeger, Toledo, Ohio.....	1552	1938	Dorothy Burmeister, Chicago.....	
1919	Mrs. B. Husk, Newark, N. J.....	1580	1939	Ruth Troy, Dayton, Ohio.....	
1920	Mrs. M. Leibrich, Chicago.....	1606	1940	Mrs. Tess Morris, Chicago.....	
1921	Mrs. Emma Jaeger, Toledo, Ohio.....	1557	1941	Mrs. Sally Twyford, Aurora, Ill.....	
1922	Mrs. R. Abraham, Milwaukee.....	1659	1942	Nina Van Camp, Chicago.....	
1923	Deane Zapf, Toledo, Ohio.....	1582	1946	Catherine Fellmeth, Chicago.....	
1924	Mrs. Rose Steger, Chicago.....	1647	1947	Marge Dardeen, Cincinnati.....	
1925	Mrs. Grayce Garwood, Cleveland.....	1703	1948	Virgie Hupfer, Burlington, Iowa.....	
1926	Mrs. E. Lackey, Ft. Wayne, Ind.....	1641	1949	Cecelia Winandy, Chicago.....	
1927	Mrs. Grayce Garwood, Cleveland.....	1644	1950	Marion Ladewig, Grand Rapids, Mich.....	
1928	Mrs. Emma Jaeger, Toledo, Ohio.....	1713	1951	LaVerne Haverley, Los Angeles.....	
1929	Mrs. Emma Jaeger, Toledo, Ohio.....	1700	1952	Virginia Turner, Gardena, Calif.....	
1930	Mrs. Selva Twyford, Chicago.....	1727	1953	Doris Knechtges, Detroit.....	
1931	Mrs. Myrtle Schulte, St. Louis.....	1742	1954	Anne Johnson, Hazleton, Pa.....	
1932	Marie Warmbier, Chicago.....	1807	1955	Marion Ladewig, Grand Rapids, Mich.....	
1933	Mrs. Sally Twyford, Aurora, Ill.....	1765	1956	Doris Knechtges, Detroit.....	
1934	Mrs. Esther Ryan, Milwaukee.....	1763	1957	Anita Cantaline, Detroit.....	
1935	Marie Warmbier, Chicago.....	1911	1958	Mae Ploegman, Chicago.....	
1936	Mrs. Ella Burmeister, Madison, Wis.....	1683	1959	Pat McBride, Grand Rapids, Mich.....	
1937	Mrs. Louise Stockdale, Detroit.....	1761			

DUCK PINS

Source: A. L. Ebersole, Executive Secretary, National Duck Pin Bowling Congress.

WORLD RECORDS

MEN

Type of Record	Holder and home city	Score
Game, singles.....	Ted Pitera, Fall River, Mass.....	240
3-game set, singles.....	Arthur Lemke, Lowell, Mass.....	542
Game, doubles.....	Truman Cowart-Billy Allen, Atlanta, Ga.....	360
3-game set, doubles.....	Mike Avon-Paul Jarmon, Washington, D. C.....	929
Game, team.....	Winchester-Packard, Washington, D. C.....	797
3-game set, team.....	National Premium Beer, Baltimore.....	2135

WOMEN

Game, singles.....	Vivian Walsh, Washington, D. C.....	232
3-game set, singles.....	Minerva Weisenborn, Baltimore.....	471
Game, doubles.....	Hazel Wells-Ruby Hovanec, Bridgeport, Conn.....	338
3-game set, doubles.....	Audrey Atkinson-Patsy Stroessner, Baltimore.....	828
Game, team.....	Fulford's Colony Radio-TV, Washington, D. C.....	749
3-game set, team.....	Star Laundry, Norwalk, Conn.....	1965

National Duck Pin Bowling Congress Tournament Champions

SINGLES

Year		Score	Year	
1928	Albert Fischer, Washington, D. C.....	403	1943-45	No tournaments..
1929	Howard Campbell, Washington, D. C., and Jack Whalen, Washington D. C.....	430	1946	Charles Kebart, New Haven, Conn.....
1930	Jack Otto, Torrington, Conn.....	432	1947	Winnie Guerke, Baltimore.....
1931	Jack Whalen, Washington, D. C.....	435	1948	Mike Dziadik, Derby, Conn.....
1932	William Arnold, Annapolis, Md.....	428	1949	John Catino, Stamford, Conn.....
1933	Howard Furlong, Hartford, Conn.....	440	1950	Hal Tucker, Baltimore.....
1934	Nick Tronsky, Willimantic, Conn.....	453	1951	Steve Witowski, Cromwell, Conn., and Tom Stirling, New Haven, Conn.....
1935	John Bianchi, New Haven, Conn.....	458	1952	Frank Hanley, Shelton, Conn.....
1936	Carl Frisk, New Britain, Conn.....	445	1953	Al Rush, Baltimore.....
1937	William E. Powell, Roanoke, Va.....	439	1954	Vince Della, Baltimore.....
1938	Astor Clarke, Washington, D. C., and Bob Liberto, Baltimore.....	448	1955	Walter Surowiecki, Meriden, Conn., and James Parker, Attleboro, Mass.....
1939	Nick Tronsky, Willimantic, Conn.....	447	1956	Al Burrell, Atlanta, Ga.....
1940	Eddie Johnson, New Haven, Conn.....	482	1957	Pat Crescenzi, Washington, D. C.....
1941	Julian Easterday, Annapolis, Md.....	459	1958	Francis Toolin, Fall River, Mass.....
1942	Bill Krauss, Roslyn, Va.....	456	1959	Hilmar Sperschneider, Baltimore.....

BASKETBALL

BASKETBALL may be unique in sports. It is the only game concerning which it is not known the date when, where and how it originated. In the winter of 1891-92, Dr. James Naismith, an instructor in the Y.M.C.A. at Springfield College (now Springfield College), Springfield, Mass., deliberately invented the game of basketball in order to provide a means of exercise and competition for the students during the closing of the football season and the opening of the baseball season. He affixed peach baskets over the side walls at opposite ends of the gymnasium and, with an association (soccer) football, organized teams to play his new game in which the purpose was to throw the ball into one basket and prevent, if possible, the opponents from tossing the ball into the other basket. Fun-

damentally, the game is the same today, though there have been some improvements in equipment and many changes in the rules.

Because Dr. Naismith had eighteen available players when he invented the game, the first rule was: "There shall be nine players on each side." Later the number of players became optional, depending upon the size of the available court, but the five-player standard was adopted when the game spread over the country. United States soldiers introduced the game in Europe in World War I and, being taken up by foreign nations, it soon became a world-wide sport. An odd point is that, though it is still chiefly an indoor game in the United States, in other countries it flourishes almost entirely outdoors.

Collegiate A. A. Champions

1949—Kentucky
1950—C.C.N.Y.
1951—Kentucky
1952—Kansas
1953—Indiana
1954—La Salle
1955—San Francisco
1956—San Francisco
1957—North Carolina
1958—Kentucky
1959—California

National Invitation Champions

(Madison Square Garden Tourney)

1938—Temple	1949—San Francisco
1939—Long Island U.	1950—C.C.N.Y.
1940—Colorado	1951—Brigham Young
1941—Long Island U.	1952—La Salle (Phila.)
1942—West Virginia	1953—Seton Hall
1943—St. John's (Bklyn.)	1954—Holy Cross
1944—St. John's (Bklyn.)	1955—Duquesne
1945—DePaul	1956—Louisville
1946—Kentucky	1957—Bradley
1947—Utah	1958—Xavier (Cincinnati)
1948—St. Louis	1959—St. John's (Bklyn.)

National A. A. U. Champions

1933—Y.M.C.A., New York
 1934—Knickerbocker A. C., New York
 1935—Woodward Y.M.C.A., Chicago
 1936—(N. Y.) Y.M.C.A.
 1937—Eagle, Wis. National Guard
 1938—Arnold (Armour Playground), Chicago
 1939—San Francisco Olympic Club
 1940—University of Utah
 1941—S. A. C.
 1942—Los Angeles A. C.
 1943—New York University
 1944—S. City A. C.
 1945—Campbell, Kansas City
 1946—S. City A. C.
 1947—University
 1948—Turn College
 1949—Lyards, St. Joseph, Mo.
 1950—Oak Paint Co., Kansas City
 1951—Henry Clothiers, Wichita, Kan.

1933-34—Diamond DX Oilers, Tulsa, Okla.
 1935—So. Kansas Stage Lines, Kansas City
 1936—Globe Refiners, McPherson, Kan.
 1937—Denver (Colo.) Safeways
 1938—Healey Motors, Kansas City
 1939—Denver (Colo.) Nuggets
 1940—Phillips Oilers, Bartlesville, Okla.
 1941—20th Century-Fox, Hollywood, Calif.
 1942—American Legion, Denver, Colo.
 1943-48—Phillips Oilers, Bartlesville, Okla.
 1949—Oakland (Calif.) Bittners
 1950—Phillips Oilers, Bartlesville, Okla.
 1951—Stewart Chevrolets, San Francisco
 1952-54—Peoria (Ill.) Cats
 1955—Phillips Oilers, Bartlesville, Okla.
 1956—Buchan Bakers, Seattle
 1957—U. S. Air Force
 1958—Peoria (Ill.) Cats
 1959—Wichita (Kan.) Vickers

Professional Champions

The National Basketball Association (N.B.A.) was created in 1949 by a merger of the National Basketball League and the Basketball Association of America. Champions follow:

National League

1944—Fort Wayne
1945—Fort Wayne
1946—Rochester
1947—Chicago
1948—Minneapolis
1949—Anderson

Association of America

1947—Philadelphia	1949—Minneapolis
1948—Baltimore	

National Association (NBA)

1950—Minneapolis	1955—Syracuse
1951—Rochester	1956—Philadelphia
1952—Minneapolis	1957—Boston
1953—Minneapolis	1958—St. Louis
1954—Minneapolis	1959—Boston

ROWING

ROWING goes back so far in history that there is no possibility of tracing it to any particular aboriginal source. The oldest rowing race still on the calendar is the "Doggett's Coat and Badge" contest among professional watermen of the Thames (England) that began in 1715. The first Oxford-Cambridge race was held at Henley in 1829. Competitive rowing in the United States began with matches between boats rowed by professional oarsmen of the New York water front. They were oarsmen who rowed the small boats that plied as ferries from Manhattan Island to Brooklyn and return, or who rowed salesmen down the harbor to meet ships arriving from Europe. Since the first salesman to meet an incoming ship had some advantage over his rivals, there was keen competition in the bidding for fast boats and the best oarsmen. This gave rise to match races for a purse or a side bet on many occasions. The first of such races was held in June, 1811, in four-oared gigs.

Amateur boat clubs sprang up in the United States between 1820 and 1830 and

seven students of Yale joined together to purchase a four-oared lap-streak in 1843. The first Harvard-Yale race was Aug. 3, 1852, on Lake Winnepesaukee. The first time an American college went abroad was in 1869 when Harvard challenged Oxford and was defeated on the Thames. There were early college races on Lake Quinsigamond, near Worcester, Mass., and on Saratoga Lake, but the Intercollegiate Rowing Association in 1895, settled on the Hudson, at Poughkeepsie, as the setting for the "Poughkeepsie Regatta." In 1950 the shifted its classic to Marietta, Ohio, and in 1952 it was moved to Syracuse, N. Y. The National Association of Amateur Oarsmen organized in 1872, has conducted a championship regattas since that time. The first rowing races were held with streak gigs but shells came into general favor about a century ago. The outboard was invented in 1830 by Clasper, an Englishman. Yale used the sliding seat in 1870.

Rowing Statistics

Source: From *American Rowing*, Copyright by Robert F. Kelley; courtesy of G. P. Putnam's Sons.

Yale-Harvard Varsity Race Record

Rowed at Centre Harbor, N. H., in 1852; Springfield, Mass., in 1855, 1872-73, 1876-77; Worcester, Mass., in 1870; Saratoga Lake, N. Y., 1874-75; New London, Conn., 1878 to 1895, 1898 to 1916, 1919 to 1941, and single triangular race at Poughkeepsie, N. Y., in 1897 with Cornell victor in 20:34; Derby, Conn., in 1918, 1919; Boston, Mass., in 1946. Course was 2 miles in 1852; 3 miles from 1855 to 1875, and 4 miles thereafter.

Year	Winner	Time	Year	Winner	Time	Year	Winner
1852	Harvard	1	1893	Yale	25:01½	1927	Harvard
1855	Harvard	22:00	1894	Yale	23:45½	1928	Yale
1859	Harvard	19:18	1895	Yale	21:30	1929	Yale
1860	Harvard	18:53	1897	Yale	20:44	1930	Yale
1864	Yale	19:01	1898	Yale	24:02	1931	Harvard
1865	Yale	18:42½	1899	Harvard	20:52½	1932	Harvard
1866	Harvard	18:43¾	1900	Yale	21:12½	1933	Harvard
1867	Harvard	18:12¾	1901	Yale	23:37	1934	Yale
1868	Harvard	17:48½	1902	Yale	20:20	1935	Yale
1869	Harvard	18:02	1903	Yale	20:19½	1936	Harvard
1870	Harvard	20:30*	1904	Yale	21:40½	1937	Harvard
1872	Harvard	16:57	1905	Yale	22:33½	1938	Harvard
1873	Yale	16:59	1906	Harvard	23:02	1939	Harvard
1874*	Harvard	16:56	1907	Yale	21:10	1940	Harvard
1875	Harvard	17:05	1908*	Harvard	24:10	1941	Harvard
1876	Yale	22:02	1909	Harvard	21:50	1942*	Harvard
1877	Harvard	24:36	1910	Harvard	20:46½	1946*	Harvard
1878	Harvard	20:44¾	1911	Harvard	22:44	1947	Harvard
1879	Harvard	22:15	1912	Harvard	21:43¾	1948	Harvard
1880	Yale	24:27	1913	Harvard	21:42	1949	Yale
1881	Yale	22:13	1914	Yale	21:16	1950	Harvard
1882	Harvard	20:47½	1915	Yale	20:52	1951	Harvard
1883	Harvard	25:46½	1916	Harvard	20:02	1952	Yale
1884	Yale	20:31	1918*	Harvard	10:58	1953	Harvard
1885	Harvard	25:15½	1919*	Yale	21:42½	1954	Yale
1886	Yale	20:42	1920	Harvard	23:11	1955	Yale
1887	Yale	22:56	1921	Yale	20:41	1956	Yale
1888	Yale	20:10	1922	Yale	21:53	1957	Yale
1889	Yale	21:30	1923	Yale	22:10	1958	Yale
1890	Yale	21:29	1924	Yale	21:58¾	1959	Harvard
1891	Harvard	21:23	1925	Yale	20:26		
1892	Yale	20:48	1926	Yale	20:14¾		

* Harvard won by 3 to 4 lengths. * Yale ran into Harvard at turn and was disqualified. * Yale did not being disabled in collision. * Yale stroke taken from shell near 3-mile mark. * Race was informal; rowed at on Housatonic. * Course was 110 feet less than 4 miles. * Rowed at 2 miles. * Rowed at 1½ miles.

INTERCOLLEGIATE ROWING ASSOCIATION REGATTA (Varsity eight-oared shells)

at 4 miles, Poughkeepsie, N. Y., 1895-97, 1899-1916, 1925-32, 1934-41. Rowed at 3 miles, Saratoga, N. Y., 1917-24, 1947-49; Syracuse, N. Y., since 1952. Rowed at 2 miles, Ithaca, N. Y., 1920; Marietta, Ga., 1921. Racing suspended 1917-19, 1933, 1942-46.

	First	Second	Third	Fourth	Fifth	Sixth
25	Columbia	Cornell	Pennsylvania			
59	Cornell	Harvard	Pennsylvania	Columbia		
47 4/5	Cornell	Columbia	Pennsylvania			
51 1/2	Pennsylvania	Cornell	Wisconsin	Columbia		
04	Pennsylvania	Wisconsin	Cornell	Columbia		
44 3/5	Pennsylvania	Wisconsin	Cornell	Columbia	Georgetown	
53 1/5	Cornell	Columbia	Wisconsin	Georgetown	Syracuse	Pennsylvania
05 3/5	Cornell	Wisconsin	Columbia	Pennsylvania	Syracuse	Georgetown
57	Cornell	Georgetown	Wisconsin	Pennsylvania	Syracuse	Columbia
22 3/5	Syracuse	Cornell	Pennsylvania	Columbia	Georgetown	Wisconsin
29	Cornell	Syracuse	Georgetown	Columbia	Pennsylvania	Wisconsin
36 4/5	Cornell	Pennsylvania	Syracuse	Wisconsin	Columbia	Georgetown
02 2/5	Cornell	Columbia	Navy	Pennsylvania	Wisconsin	Georgetown
24 1/5	Syracuse	Columbia	Cornell	Pennsylvania	Wisconsin	
02	Cornell	Columbia	Syracuse	Wisconsin	Pennsylvania	
42 1/5	Cornell	Pennsylvania	Columbia	Syracuse	Wisconsin	
10 4/5	Cornell	Columbia	Pennsylvania	Wisconsin	Syracuse	
31 2/5	Cornell	Wisconsin	Columbia	Syracuse	Pennsylvania	Stanford
28 3/5	Syracuse	Cornell	Washington	Wisconsin	Columbia	Pennsylvania
37 4/5	Columbia	Pennsylvania	Cornell	Syracuse	Washington	Wisconsin
36 3/5	Cornell	Stanford	Syracuse	Columbia	Pennsylvania	
15 2/5	Syracuse	Cornell	Columbia	Pennsylvania		
02 3/5	Syracuse	Cornell	Columbia	Pennsylvania		
07	Navy	California	Cornell	Pennsylvania	Syracuse	Columbia
33 3/5	Navy	Washington	Syracuse	Cornell	Columbia	Pennsylvania
03 1/5	Washington	Navy	Columbia	Syracuse	Cornell	Pennsylvania
02	Washington	Wisconsin	Cornell	Pennsylvania	Syracuse	Columbia
24 4/5	Navy	Washington	Wisconsin	Pennsylvania	Cornell	Syracuse
28 3/5	Washington	Navy	Syracuse	Pennsylvania	Columbia	California
57	Columbia	Washington	California	Navy	Cornell	Syracuse
35 4/5	California	Columbia	Washington	Cornell	Navy	Syracuse
58	Columbia	Washington	Pennsylvania	Navy	Wisconsin	
02	Cornell	Syracuse	M. I. T.	California	Columbia	Washington
34 1/5	Navy	Cornell	Washington	California	Syracuse	Pennsylvania
05	California	Cornell	Washington	Navy	Syracuse	Columbia
4	California	Washington	Navy	Cornell	Pennsylvania	Syracuse
02	California	Cornell	Washington	Navy	Syracuse	Pennsylvania
09 3/5	Washington	California	Navy	Columbia	Cornell	Pennsylvania
33 3/5	Washington	Navy	Cornell	Syracuse	California	Columbia
9	Navy	California	Washington	Columbia	Wisconsin	Cornell
2 3/5	California	Washington	Navy	Cornell	Syracuse	Wisconsin
2	Washington	Cornell	Syracuse	Navy	California	Columbia
3 3/10	Washington	California	Cornell	Syracuse	Princeton	Wisconsin
9 1/5	Navy	Cornell	Washington	California	Princeton	Syracuse
6 2/5	Washington	California	Navy	Cornell	M. I. T.	Princeton
2 3/5	California	Washington	Cornell	Navy	Princeton	Pennsylvania
5	Washington	California	Wisconsin	Stanford	M. I. T.	Columbia
5	Wisconsin	Washington	Princeton	California	Pennsylvania	M. I. T.
8.1	Navy	Princeton	Cornell	Wisconsin	California	Columbia
9.6	Navy	Cornell	Washington	Wisconsin	Columbia	California
4.4	†Navy	Cornell	Washington	Wisconsin	California	Columbia
9.9	Cornell	Pennsylvania	Navy	Washington	Stanford	California
2.4	Cornell	Navy	Wisconsin	Washington	Stanford	Pennsylvania
6.6	Cornell	Penn	Stanford	Princeton	Syracuse	Navy
2.1	Cornell	Navy	Syracuse	Princeton	California	Pennsylvania
1.7	Wisconsin	Syracuse	Navy	California	Washington	Cornell

for three miles. † Record for four miles. ‡ Disqualified.

1925, Columbia; 1926, Wisconsin; 1927, Columbia; 1928, Pennsylvania; 1930, Pennsylvania; 1932, Pennsylvania; 1934, Columbia; 1936, Syracuse; 1937, Wisconsin; 1939, Columbia; 1940, Wisconsin; 1947, Wisconsin; 1948, Pennsylvania; 1950, Cornell; 1951, Stanford; 1953, Pennsylvania; 1954, Pennsylvania; 1955, Princeton; 1956, Dartmouth; 1957, Dartmouth; 1959, Dartmouth.

1928, Cornell; 1930, Wisconsin; 1931, Wisconsin; 1940, Princeton; 1941, M.I.T.; 1947,

M.I.T.; 1948, Wisconsin; 1949, Columbia; 1950, Pennsylvania; 1951, Cornell; 1952, Stanford; 1953, Princeton; 1954, Boston U.; 1955, Princeton; 1956, Syracuse; 1957, M.I.T.; 1958, Wisconsin; 1959, Pennsylvania.

NINTH—1931, M. I. T.; 1941, Columbia; 1947, Pennsylvania; 1948, Syracuse; 1949, Syracuse; 1950, Princeton; 1951, Syracuse; 1952, Pennsylvania; 1953, Syracuse; 1954, Princeton; 1955, Wisconsin; 1956, M.I.T.; 1957, Wisconsin; 1958, M.I.T.; 1959, Princeton.

TENTH—1947, Rutgers; 1948, Columbia; 1949, Stanford; 1950, Syracuse; 1951, Boston U.; 1952, M. I. T.; 1953, M.I.T.; 1954, M.I.T.; 1955, M.I.T.; 1956, California; 1957, Columbia; 1958, Columbia; 1959, M.I.T.

SQUASH RACQUETS

National Champions

1907-08.....	John A. Miskey, Overbrook G. C.	1933.....	Beekman Pool, Harvard Club, New York
1909.....	W. L. Freeland, Germantown C. C.	1934.....	Neil J. Sullivan, Germantown C. C.
1910.....	John A. Miskey, Overbrook G. C.	1935.....	Donald Strachan, Philadelphia C. C.
1911.....	F. S. White, Germantown C. C.	1936.....	Germain G. Glidden, Harvard University
1912.....	Constantine Hutchins, Boston A. A.	1937-38.....	Germain G. Glidden, Harvard Club, New York
1913.....	Mortimer L. Newhall, Germantown C. C.	1939.....	Donald Strachan, Merion C. C.
1914.....	Constantine Hutchins, Boston T. and R. Club	1940.....	A. Willing Patterson, Philadelphia R. C.
1915-17.....	Stanley W. Pearson, Germantown C. C.	1941-42.....	Charles W. Brinton, Princeton University
1918-19.....	No tournaments	1943-45.....	No tournaments
1920.....	Charles C. Peabody, Union B. C., Boston	1946-47.....	Charles W. Brinton, Philadelphia
1921-23.....	Stanley W. Pearson, Philadelphia R. C.	1948.....	Stanley W. Pearson, Jr., Philadelphia
1924.....	Gerald Roberts, Bath Club, London	1949.....	Hunter H. Lott, Jr., Merion C. C.
1925.....	W. Palmer Dixon, Harvard University	1950-51.....	Edward Hahn, Detroit
1926.....	W. Palmer Dixon, R. and T. Club, N. Y.	1952.....	Harry Conlon, Buffalo, N. Y.
1927.....	Myles P. Baker, Boston A. A.	1953.....	Ernie Howard, Toronto
1928.....	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.	1954.....	G. Diehl Mateer, Jr., Philadelphia
1929.....	J. Lawrence Pool, Harvard Club, New York	1955.....	Henri Salaun, Boston
1930.....	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.	1956.....	G. Diehl Mateer, Jr., Philadelphia
1931.....	J. Lawrence Pool, Harvard Club, New York	1957-58.....	Henri Salaun, Boston
1932.....	Beekman Pool, Harvard University	1959.....	Ben Heckscher, Devon, Pa.

SQUASH TENNIS

National Champions

Year	Winner and Club	Year	Winner and Club
1911-12.....	Alfred Stillman, Harvard	1938.....	Harry F. Wolf, Montclair
1913.....	George Whitney, Harvard	1939-40.....	Harry F. Wolf, New York A. C.
1914.....	Alfred Stillman, Harvard	1941.....	Joseph J. Lordi, New York A. C.
1915-17.....	Eric S. Winston, Harvard	1942.....	H. Robert Reeve, Bayside T. C.
1918.....	Fillmore Van S. Hyde, Harvard	1943-45.....	No tournaments
1919.....	John W. Appel, Jr., Harvard	1946.....	Frank R. Hanson, Columbia
1920.....	Auguste J. Cordier, Yale	1947.....	Frederick B. Ryan, Jr., Yale
1921.....	Fillmore Van S. Hyde, Harvard	1948-49.....	H. Robert Reeve, Bayside T. C.
1922.....	Thomas R. Coward, Yale	1950.....	H. Robert Reeve, Nassau C. C.
1923.....	R. Earl Fink, Crescent	1951.....	J. T. P. Sullivan, Yale
1924.....	Fillmore Van S. Hyde, Harvard	1952.....	H. Robert Reeve, New York A. C.
1925.....	William Rand, Jr., Harvard	1953.....	Howard J. Rose, Princeton Club
1926.....	Fillmore Van S. Hyde, Harvard	1954-55.....	H. Robert Reeve, Bayside T. C.
1927-29.....	Rowland B. Haines, Columbia	1956.....	H. Robert Reeve, New York A. C.
1930-37.....	Harry F. Wolf, New York A. C.	1957-59.....	J. Lenox Porter, New York

RACQUETS

National Champions

1890	B. Spalding de Garmendia, N. Y. Racquet Court	1920-22	C. C. Pell, R. and T. Club and Tuxedo
1891	B. Spalding de Garmendia, R. and T. Club	1923	S. G. Mortimer, R. and T. Club and Tuxedo
1892	J. S. Tooker, R. and T. Club, Boston A. A.	1924-25	C. C. Pell, R. and T. Club and Tuxedo
1893-94	B. Spalding de Garmendia, R. and T. Club	1926	S. G. Mortimer, R. and T. Club and Tuxedo
1895	J. S. Tooker, R. and T. Club, Boston A. A.	1927-28	C. C. Pell, R. and T. Club and Tuxedo
1896-97	B. Spalding de Garmendia, R. and T. Club	1929	H. D. Sheldon, R. and T. Club
1898	F. F. Rolland, Canada	1930	S. G. Mortimer, R. and T. Club and Tuxedo
1899	Quincy A. Shaw, Jr., Boston A. A.	1931-33	C. C. Pell, R. and T. Club and Tuxedo
1900	Eustace H. Miles, England	1934	E. M. Edwards, Philadelphia R. C.
1901	Quincy A. Shaw, Jr., Boston A. A.	1935	H. D. Sheldon, R. and T. Club
1902	Clarence H. Mackay, R. and T. Club	1936	E. M. Edwards, Philadelphia R. C.
1903	Payne Whitney, R. and T. Club	1937-39	Robert Grant, III, R. and T. Club
1904	George H. Brooke, Philadelphia R. C.	1940	Warren Ingersoll, III, Philadelphia R. C.
1905	Lawrence Waterbury, R. and T. Club	1941	Robert Grant, III, R. and T. Club
1906	Percy D. Haughton, R. and T. Club	1942-45	No tournaments
1907	Reginald Fincke, R. and T. Club	1946	Robert Grant, III, R. and T. Club
1908	Quincy A. Shaw, Jr., Boston T. and R. Club	1947	J. Richards Leonard, R. and T. Club
1909	H. F. McCormick, University Club, Chicago	1948-51	Robert Grant, III, R. and T. Club
1910	Quincy A. Shaw, Jr., Boston T. and R. Club	1952	S. W. Pearson, Jr., Philadelphia R. C.
1911-12	Reginald Fincke, R. and T. Club	1953	Robert Grant, III, R. and T. Club
1913-14	Lawrence Waterbury, R. and T. Club	1954-56	Geoffrey W. T. Atkins, Chicago
1915	C. C. Pell, R. and T. Club and Tuxedo	1957	Charles Pearson, Philadelphia
1916	S. G. Mortimer, R. and T. Club and Tuxedo	1958	Clarence C. Pell, Jr., New York
1917	C. C. Pell, R. and T. Club and Tuxedo	1959	Geoffrey W. T. Atkins, New York
1918-19	No tournaments		

BADMINTON

National Champions

MEN'S SINGLES

alter Kramer, Detroit
 David Freeman, Pasadena, Calif.
 No competition.
 David Freeman, Pasadena, Calif.
 Martin Mendez, San Diego, Calif.
 Joseph Alston, San Diego, Calif.
 Martin Mendez, San Diego, Calif.
 David Freeman, Pasadena, Calif.
 Hddy Choong, Malaya
 Joseph Alston, So. Pasadena, Calif.
 Finn Kobbero, Denmark
 Tom Poole, San Diego, Calif.
 John Joe Hok, Indonesia

MEN'S DOUBLES

Heather Gross-Donald Eversoll, Los Angeles
 Hamilton Law-Richard Yeager, Seattle
 Heather Goss-David Freeman, Pasadena, Calif.
 No competition.
 David Freeman-Webster Kimball, Pasadena, Calif.
 David Freeman, Pasadena, Calif.-Wynn Rogers, Arcadia, Calif.
 Barney McCay, Pasadena, Calif.-Wynn Rogers, Arcadia, Calif.
 Joseph Alston, San Diego, Calif.-Wynn Rogers, Arcadia, Calif.
 Hoi Teik Hock-Ong Poh Lim, Malaya
 Joseph Alston, So. Pasadena, Calif.-Wynn Rogers, Arcadia, Calif.
 Finn Kobbero-Jorgen Hansen, Denmark
 John Kew San-Lim Say Hup, Malaya

WOMEN'S SINGLES

1937-38 Mrs. Del Barkhuff, Seattle
 1939 Mary Whittemore, Boston
 1940 Evelyn Boldrick, San Diego, Calif.
 1941 Thelma Kingsbury, Oakland, Calif.
 1942 Evelyn Boldrick, San Diego, Calif.
 1943-46 No competition.
 1947-53 Ethel Marshall, Buffalo, N. Y.
 1954 Judith Devlin, Baltimore
 1955 Margaret Varner, Boston
 1956-59 Judith Devlin, Baltimore

WOMEN'S DOUBLES

1937 Mrs. Del Barkhuff-Zoe Smith, Seattle
 1938 Mrs. Roy Bergman-Helen Gibson, Westport, Conn.
 1939 Mrs. Del Barkhuff-Zoe Smith, Seattle
 1940 Elizabeth Anselm-Helen Zabriskie, Oakland, Calif.
 1941 Thelma Kingsbury-Janet Wright, Oakland, Calif.
 1942 Evelyn Boldrick, San Diego, Calif.-Janet Wright, Oakland, Calif.
 1943-46 No competition.
 1947-50 Thelma K. Scovill-Janet Wright, San Francisco
 1951 Dottie Hann, Manhattan Beach, Calif.-Loma Smith, Pasadena, Calif.
 1952 Ethel Marshall-Beatrice Massman, Buffalo, N. Y.
 1953-55 Judith Devlin-Susan Devlin, Baltimore
 1956 Ethel Marshall-Beatrice Massman, Buffalo, N. Y.
 1957-59 Judith Devlin-Susan Devlin, Baltimore

TABLE TENNIS

National Champions

MEN'S SINGLES

us Schussheim, New York
 man Clark, Chicago*
 us Schussheim, New York*
 s M. Jacobson, New Rochelle, N. Y.*
 ay Heitner, New York*
 s McClure, Indianapolis*
 chiff, New York*
 erenbaum, New York
 r Barna, Hungary†
 chiff, New York†
 o Bellak, Hungary†
 o Bellak, Hungary
 s McClure, Indianapolis
 uis Pagliaro, New York
 m Holzrichter, Chicago
 Somael, New York
 chard Miles, New York
 Leach, England
 rd Miles, New York
 Pagliaro, New York
 chard Miles, New York
 Klein, Los Angeles
 ard Bukiet, Cleveland
 n Reisman, New York
 Gusikoff, New York

MEN'S DOUBLES

s M. Jacobson-George T. Bacon, Jr., New Rochelle.
 Pearson-Edwin Lewis, Chicago*
 Langsam-Lloyd Waterson, New York*

1934 Samuel Silberman-Alan Lobell, New York*
 Sol Schiff, N. Y.-Manny Moskowitz, Rutherford, N. J.*
 1935 A. Berenbaum, N. Y.-Edward Silverglade, Trenton, N. J.
 1936 James McClure, Indianapolis-Robert Blattner, St. Louis†
 James M. Jacobson, New Rochelle, N. Y.-Sol Schiff, New York†
 1937 Laszlo Bellak, Hungary-Standa Kolar, Czechoslovakia†
 1938 Sol Schiff, New York-James McClure, Indianapolis
 1939 Laszlo Bellak-Tibor Hazi, Hungary
 1940 Sol Schiff, New York-James McClure, Indianapolis
 1941-42 Edward Pinner-Cy Sussman, New York
 1943 Laszlo Bellak, New York-Tibor Hazi, Philadelphia
 1944 William Holzrichter, Chicago-Laszlo Bellak, N. Y.
 1945 John Somael, New York-Max Hersh, Detroit
 1946 Edward Pinner-Cy Sussman, New York
 1947 Douglas Cartland-Arnold Fetbrod, New York
 1948 Tibor Hazi, Washington-John Somael, New York
 1949 Martin Reisman-Sol Schiff, New York
 1950 John Leach-Jack Carrington, England
 1951 Martin Reisman, N. Y.-Wm. Holzrichter, Chicago
 1952 Richard Miles-Sol Schiff, New York
 1953 Richard Miles-John Somael, New York
 1954 Bernard Bukiet, Chicago-Tibor Hazi, Washington
 1955-56 R. Bergmann, England-E. Klein, Los Angeles
 1957 Wm. Holzrichter, Geneva, Ill.-Norbert Van Dewalle, Chicago
 1958 Richard Miles-Martin Reisman, New York
 1959 Bob Gusikoff-Sol Schiff, New York

champions. At the time there were two national associations; each with its own champion. † Open champion closed championships.

POLO

POLO originated "somewhere east of Suez" but exactly where never has been determined. There is pictorial proof that it was played many centuries ago in Persia, Japan, China and Tibet, but it reached England by way of a border tribe in India known as the Manipuri. British army officers in India, about 1860, found the Manipuri playing polo and learned the game from them. The fact that the Manipuri used small native horses—they had no others—was the reason for the early height limit (14 hands) on polo mounts, from which arose the custom of calling them "polo ponies," which was abandoned in 1919.

In 1869 some officers of the 10th Hussars, returning from India, introduced the game in England and informal games were played with as many as eight players on a side. Formal competition at Hurlingham, the great shrine of the game, began in 1876 with five players on a side, which

number was cut to four in 1882. In 1882 an outstanding English player by the name of John Watson invented the backstroke and much improved the tactics of the game.

James Gordon Bennett, Jr., noted American newspaper owner and editor, saw at Hurlingham in 1875, brought the elements to this country, had a carload of cow ponies sent up from Texas and promoted a game that was played indoors at the Dickel Riding Academy at Fifth Avenue and 39th Street, New York City, in 1876. Polo moved outdoors to the Jerome Park race course and other suitable places soon after. One field on which it was played at Fifth Avenue and 110th Street, taken over by the New York baseball team in the National League and that is the field on which the "Giants" play ball, although there had been two changes in site, still is called "the Polo Grounds."

INTERNATIONAL MATCHES

Great Britain vs. United States

Year	Winner	Site
1886	Great Britain	Newport, R. I.
1902	Great Britain	Hurlingham
1909	United States	Hurlingham
1911	United States	Meadow Brook
1913	United States	Meadow Brook
1914	Great Britain	Meadow Brook
1921	United States	Hurlingham
1924	United States	Meadow Brook
1927	United States	Meadow Brook

Year	Winner	Site
1930	United States	Meadow Brook
1936	United States	Hurlingham
1939	United States	Meadow Brook

Argentina vs. United States

Year	Winner	Site
1928	United States	Meadow Brook
1932	United States	Buenos Aires
1936	Argentina	Meadow Brook
1950	Argentina	Buenos Aires

NATIONAL OPEN CHAMPIONS

Not held from 1905 to 1909, inclusive; 1911, 1915, 1917, 1918, and from 1942 to 1945, inclusive.

1904—WANDERERS

- 1—C. R. Snowden
- 2—J. E. Cowdin
- 3—J. M. Waterbury, Jr.
- Back—L. Waterbury

1910—RANELAGH

- 1—R. N. Grenfell
- 2—F. Grenfell
- 3—Earl of Rocksavage
- Back—F. A. Gill

1912—COOPERSTOWN

- 1—F. S. von Stade
- 2—C. C. Rumsey
- 3—C. P. Beadleston
- Back—M. Stevenson

1913—COOPERSTOWN

- 1—F. S. von Stade
- 2—C. C. Rumsey
- 3—C. P. Beadleston
- Back—M. Stevenson

1914—MEADOW BROOK

- 1—N. L. Tilney
- 2—J. W. Webb
- 3—W. G. Loew
- Back—H. Phipps

1916—MEADOW BROOK

- 1—H. Phipps
- 2—C. C. Rumsey
- 3—W. G. Loew
- Back—D. Milburn

1919—MEADOW BROOK

- 1—F. H. Prince, Jr.
- 2—J. W. Webb
- 3—F. S. von Stade
- Back—D. Milburn

1920—MEADOW BROOK

- 1—F. S. von Stade
- 2—J. W. Webb
- 3—R. E. Strawbridge, Jr.
- Back—D. Milburn

1921—GREAT NECK

- 1—L. E. Stoddard
- 2—R. Wanamaker, II
- 3—J. W. Webb
- Back—R. E. Strawbridge, Jr.

1922—ARGENTINE

- 1—J. B. Miles
- 2—J. D. Nelson
- 3—D. B. Miles
- Back—L. L. Lacey

1923—MEADOW BROOK

- 1—R. Belmont
- 2—T. Hitchcock, Jr.
- 3—R. E. Strawbridge, Jr.
- Back—D. Milburn

1924—MIDWICK

- 1—E. G. Miller
- 2—E. L. Pedley
- 3—A. P. Perkins
- Back—C. F. Burke

1925—ORANGE COUNTY

- 1—W. A. Harriman
- 2—J. W. Webb
- 3—M. Stevenson
- Back—J. C. Cowdin

1926—HURRICANES

- 1—S. Sanford
- 2—E. L. Pedley
- 3—Capt. C. T. I. Roark
- Back—R. E. Strawbridge, Jr.

1927—SANDS POINT

- 1—W. A. Harriman
- 2—T. Hitchcock, Jr.
- 3—J. C. Cowdin
- Back—L. E. Stoddard

1928—MEADOW BROOK

- 1—C. V. Whitney
- 2—W. F. C. Guest
- 3—J. B. Miles
- Back—M. Stevenson

1929—HURRICANES

- 1—S. Sanford
- 2—Capt. C. T. I. Roark
- 3—J. W. Webb
- Back—R. E. Strawbridge, Jr.

1930—HURRICANES

- 1—S. Sanford
- 2—E. L. Pedley
- 3—Capt. C. T. I. Roark
- Back—R. E. Strawbridge, Jr.

1931—SANTA PAUL

- 1—A. Gazzotti
- 2—José Reynal
- 3—Juan Reynal
- Back—M. Andrade

1932—TEMPLETON

- 1—M. G. Phipps
- 2—W. F. C. Guest
- 3—S. B. Iglehart
- Back—R. R. Guest

National Open Polo Champions (Cont.)

3—AURORA

Knox
Hills
Gerry
J. Boeseke, Jr.

—TEMPLETON

Phipps
C. Guest
Iglehart
R. Guest

—GREENTREE

Bostwick
Hancock, Jr.
ding
H. Whitney

—GREENTREE

Bostwick
ding
Hancock, Jr.
H. Whitney

LD WESTBURY

Phipps
Smith
Iglehart
J. Whitney

1938—OLD WESTBURY

1—M. G. Phipps
2—Cecil Smith
3—S. B. Iglehart
Back—C. V. Whitney

1939—BOSTWICK FIELD

1—G. H. Bostwick
2—R. L. Gerry, Jr.
3—E. T. Gerry
Back—E. H. Tyrrell-Martin

1940—AKNUSTI

1—G. S. Smith
2—R. L. Gerry, Jr.
3—E. T. Gerry
Back—A. L. Corey, Jr.

1941—GULF STREAM

1—J. H. A. Phipps
2—M. G. Phipps
3—C. S. von Stade
Back—A. L. Corey, Jr.

1946—HERRADURA

1—Gabriel Gracida
2—Guillermo Gracida
3—Alejandro Gracida
Back—José Gracida

1947—OLD WESTBURY

1—P. Silvero
2—C. C. Combs
3—S. B. Iglehart
Back—G. Oliver

1948—HURRICANES

1—L. Sheerin
2—P. Perkins
3—Cecil Smith
Back—S. Sanford

1949—HURRICANES

1—L. Sheerin
2—R. Cavanaugh
3—Cecil Smith
Back—S. Sanford

1950—BOSTWICK FIELD

1—G. H. Bostwick
2—George Oliver
3—A. L. Corey, Jr.
Back—D. Milburn, Jr.

1951—MILWAUKEE

1—Pedro Silvero
2—Peter Perkins
3—George Oliver
Back—Bob Uihlein

1952—BEVERLY HILLS

1—Bob Fletcher
2—Tony Veen
3—Robert Skene
Back—Carlton Beal

1953—MEADOW BROOK

1—Henry Lewis, III
2—Philip Iglehart
3—A. L. Corey, Jr.
Back—G. H. Bostwick

1954—M. BROOK—CCC

1—A. D. Beveridge
2—Paul Barry
3—A. L. Corey, Jr.
Back—G. H. Bostwick

1955—DETROIT—CCC

1—A. D. Beveridge
2—William Linfoot
3—Paul Barry
Back—Harold Barry

1956—BRANDYWINE

1—Raworth Williams
2—Ray Harrington
3—Clarence Combs
Back—William Mayer

1957—DETROIT CCC

1—A. D. Beveridge
2—Robert Beveridge
3—George Oliver
Back—Harold Barry

1958—DALLAS A. C.

1—Rayworth Williams
2—William Linfoot
3—Robert Skene
Back—Luis Ramos

1959—CIRCLE F, DALLAS

1—Delmar Carroll
2—Ray Harrington
3—William Mayer
Back—Russell Firestone

CHESS

Source: *American Chess Bulletin* of New York.

World Champions

Adolph Anderssen, Germany
Paul Morphy, New Orleans, La.
Adolph Anderssen, Germany
William Steinitz, Austria
Emanuel Lasker, Germany
Jose R. Capablanca, Cuba
Alexander A. Alekhine, Russia
Dr. Max Euwe, Netherlands
Alexander A. Alekhine, Russia*
Mikhail Botvinnik, Russia
Vassily Smyslov, Russia
Mikhail Botvinnik, Russia
line, a French citizen, died while champion.

United States Champions

Paul Morphy, New Orleans, La.
George H. Mackenzie, New York

1887-92 Max Judd, St. Louis, Mo.
1892-94 Simon Lipschuetz, New York
1894 Jackson W. Showalter, Georgetown, Ky.
1894 Albert B. Hodges, Staten Island, N. Y.*
1894-97 Jackson W. Showalter, Georgetown, Ky.
1897-1906 Harry Nelson Pillsbury, Boston, Mass.
1906-09 Jackson W. Showalter, Georgetown, Ky.
1909-36 Frank J. Marshall, New York
1936-44 Samuel Reshevsky, New York†
1944-46 Arnold S. Denker, New York
1946 Samuel Reshevsky, Boston
1948 Herman Steiner, Los Angeles
1951 Larry Evans, New York
1954-57 Arthur Bisguier, New York
1958-59 Bobby Fischer, Brooklyn, N. Y.

* Retired after winning return match with Showalter.
† In 1942, Isaac I. Kashdan of New York was co-champion for a while because of a tie with Reshevsky in that year's tournament. Reshevsky won the play-off.

RODEO

Source: Gene Lamb, Editor, *Rodeo Sports News*, Denver, Colo.

Rodeo Cowboys' Association

All-Around Cowboy

Whatley, Hugo, Okla.
ld Roberts, Strong City, Kan.
Shoulders, Henryetta, Okla.
inderman, Walla Walla, Wash.
y Tibbs, Ft. Pierre, S. D.
y Tompkins, Dublin, Tex.
inderman, Walla Walla, Wash.

1954—Buck Rutherford, Lenapah, Okla.
1955—Casey Tibbs, Ft. Pierre, S. D.
1956—Jim Shoulders, Henryetta, Okla.
1957—Jim Shoulders, Henryetta, Okla.
1958—Jim Shoulders, Henryetta, Okla.
1959—Jim Shoulders, Henryetta, Okla.

MOTORBOATING

SINCE the source of power—the internal combustion engine—is the same in the motorboat as it is in the automobile, the history of motorboat racing parallels that of auto racing. There was a sporting risk in driving the early power boats. As soon as they began to show a degree of dependability, there came the informal rivalries of the rivers and lakes. These led to the formal contests of speed and endurance

over marked courses under the control of the American Power Boat Association. The races were severe tests of all parts of power boats and what was learned in the annual Gold Cup competition, which started in 1904, caused a great improvement in the designing of engines and hulls. The development of the outboard motor opened up another branch of power boat competition of wide popularity.

Motorboating Statistics

Source: American Power Boat Association.

GOLD CUP WINNERS

Beginning with 1922 the race for the American Power Boat Association Gold Cup was open only to displacement boats of over 25 feet in length and powered with motors of not more than 625 inches piston displacement. In 1946 the rules were liberalized to encourage the entry of smaller, less expensive craft. Boats now are required to be between 10 and 40 feet in length, with horsepower unlimited.

Year	Winner and owner	Best heat m.p.h.
1904	STANDARD, C. C. Riotte	23.6
1904	VINGT-ET-UN II, W. Sharpe Kilmer	25.3
1905	CHIP, J. Wainwright	15.9
1906	CHIP II, J. Wainwright	20.6
1907	CHIP II, J. Wainwright	20.8
1908	DIXIE II, E. J. Schroeder	30.9
1909	DIXIE II, E. J. Schroeder	32.9
1910	DIXIE III, F. K. Burnham	33.6
1911	MIT II, J. H. Hayden	36.1
1912	P. D. Q. II, Alfred G. Miles	44.5
1913	ANKLE DEEP, C. S. Mankowski	50.49
1914	BABY SPEED DEMON II, Paula Blackton	48.5
1915	MISS DETROIT, Miss Detroit P. B. A.	49.7
1916	MISS MINNEAPOLIS, Miss Minneapolis B. A.	36.8
1917	MISS DETROIT II, Gar Wood	56.5
1918	MISS DETROIT III, Detroit Yachtsmen	52.1
1919	MISS DETROIT III, Gar Wood	56.3
1920	MISS AMERICA, Gar Wood	70.0
1921	MISS AMERICA, Gar Wood	56.5
1922	PACKARD-CHRISRAFT, J. G. Vincent	40.6
1923	PACKARD-CHRISRAFT, J. G. Vincent	44.4
1924	BABY BOOTLEGGER, Caleb Bragg	46.4
1925	BABY BOOTLEGGER, Caleb Bragg	48.4
1926	GREENWICH FOLLY, G. H. Townsend	49.22
1927	GREENWICH FOLLY, G. H. Townsend	50.99
1929	IMP, R. F. Hoyt	50.489

Year	Winner and owner
1930	HOTSY TOTSY, V. Kliesrath
1931	HOTSY TOTSY, V. Kliesrath-R. Hoyt
1932	DELPHINE IV, Horace E. Dodge
1933	EL LAGARTO, G. Reis
1934	EL LAGARTO, G. Reis
1935	EL LAGARTO, G. Reis
1936	IMPISHI, Horace E. Dodge
1937	NOTRE DAME, Herbert Mendelson
1938	ALAGI, Theo Ross
1939	MY SIN, Z. G. Simmons Jr.
1940	HOTSY TOTSY III, Sidney Allen
1941	MY SIN, Z. G. Simmons Jr.
1946	TEMPO VI, Guy Lombardo
1947	MISS PEPSI V, Dossin Brothers
1948	MISS GREAT LAKES, Albin Fallon
1949	MY SWEETIE, E. Gregory-E. Schoenherr
1950	SLO-MO-SHUN IV, Stanley S. Sayres
1951	SLO-MO-SHUN V, Stanley S. Sayres
1952	SLO-MO-SHUN IV, Stanley S. Sayres
1953	SLO-MO-SHUN IV, Stanley S. Sayres
1954	SLO-MO-SHUN V, Stanley S. Sayres
1955	GALE V, Joseph Schoenith
1956	MISS THRIFTWAY, Willard Rhodes
1957	MISS THRIFTWAY, Willard Rhodes
1958	HAWAII KAI, Edgar Kaiser
1959	MAVERICK, William T. Waggoner, Jr.

HARMSWORTH TROPHY WINNERS

Year	Boat and Country	Speed*
1903	NAPIER I, France	19.53
1904	TREFLE-A-QUATRE, England	26.63
1905	NAPIER II, England	26.03
1906	YARROW-NAPIER, England	15.48
1907	DIXIE I, United States	31.78
1908	DIXIE II, United States	31.347
1910	DIXIE III, United States	36.04
1911	DIXIE IV, United States	40.28
1912	MAPLE LEAF IV, England	43.18
1913	MAPLE LEAF IV, England	57.45
1920	MISS AMERICA I, United States	61.51

Year	Boat and Country
1921	MISS AMERICA II, United States
1926	MISS AMERICA V, United States
1928	MISS AMERICA VII, United States
1929	MISS AMERICA VIII, United States
1930	MISS AMERICA IX, United States
1931	MISS AMERICA VIII, United States
1932	MISS AMERICA X, United States
1933	MISS AMERICA X, United States
1949	SKIP-A-LONG, United States
1950	SLO-MO-SHUN IV, United States
1956	SHANTY I, United States
1959	MISS SUPERTEST III, Canada

* In statute miles per hour.

† First of hydroplanes to win, predecessors being all displacement craft.

YACHTING

sailed in search of the Golden Age. Cleopatra (according to Shakespeare) had a royal barge with purple sails. Columbus had three sailing ships when he crossed the Atlantic westward in 1492. But who the first sailor was and how he launched his primitive craft no one will know. The word "yacht" is of Dutch origin and the first "yacht race" recorded in the English language was a contest from Greenwich to Gravesend and return in 1662 between a Dutch ship designed and, at some part of the voyage, captained by Charles II of England. The Dutch yacht won the contest.

first yacht club was organized at
ireland, in 1720 under the name of
Cork Harbour Water Club, later
led to the Royal Cork Yacht Club.
Royal Yacht Squadron was organized

AMERICA'S CUP RECORD

AMERICA'S CUP RECORD

Winner and owner

ERICA (1), John C. Stevens, U. S.
GIC (1), Franklin Osgood, U. S.
LUMBIA (2), Franklin Osgood, U. S.
PHO (2), William P. Douglas, U. S.
ELEINE (2), John S. Dickerson, U. S.
CHIEF (2), J. R. Busk, U. S.
ITAN (2), J. M. Forbes-Gen. Charles Paine, U. S.
FLOWER (2), Gen. Charles Paine, U. S.
UNTEER (2), Gen. Charles Paine, U. S.
PLANT (3), C. Oliver Iselin et al, U. S.
ENDER (3), C. O. Iselin-W. K. Vanderbilt-E. D. Morgan, U. S.

UMBIA (3), J. P. Morgan-C. O. Iselin, U. S.
 UMBIA (3), Edwin D. Morgan, U. S.
 UANCE (3), Cornelius Vanderbilt et al, U. S.
 OLUTE (3), Henry Walters et al, U. S.
 ERPRISE (4), Harold S. Vanderbilt et al, U. S.
 NBOW (4), Harold S. Vanderbilt, U. S.
 GER (4), Harold S. Vanderbilt, U. S.
 UMBIA (4), Henry Sears et al, U. S.

pen British yachts started against America; Aurora finished second. † Cambria sailed against 23 U.S. † finished tenth. † Columbia was disabled in the third race, after winning the first two; Sappho substituted the fourth and fifth.

at Cowes in 1812 and the name changed to the Royal Yacht Club in 1820. The New York Yacht Club was organized aboard the Stevens schooner "Gimcrack" on July 30, 1844, and a clubhouse erected at Elysian Fields, Hoboken, N. J., the following year.

From that time until the Civil War races were held over courses starting from the water off the yacht club promontory. One course was to the Sandy Hook Lightship and return.

In 1850 the celebrated "America" was built by a group of New York yachtsmen and sent abroad to compete at Cowes. In a race around the Isle of Wight, with a special cup as a prize, the "America" defeated fourteen English boats and brought back the trophy that has been raced for as "The America's Cup" in many international yacht races since that time.

Loser and owner

*AURORA, T. Le Marchant, England
†CAMBRIA, James Ashbury, England
LIVONIA (1), James Ashbury, England

COUNTESS OF DUFFERIN, Chas. Gifford, Canada
 ATALANTA, Alexander Cuthbert, Canada
 GENESTA, Sir Richard Sutton, England
 GALATEA, Lt. William Henn, England
 THISTLE, James Bell et al, Scotland
 VALKYRIE II, Lord Dunraven, England
 VALKYRIE III, Lord Dunraven-Lord Lonsdale-Lord
 Wolverton, England

SHAMROCK I, Sir Thomas Lipton, Ireland
SHAMROCK II, Sir Thomas Lipton, Ireland
SHAMROCK III, Sir Thomas Lipton, Ireland
SHAMROCK IV (2), Sir Thomas Lipton, Ireland
SHAMROCK V, Sir Thomas Lipton, Ireland
ENDEAVOUR (2), T. O. M. Sopwith, England
ENDEAVOUR II, T. O. M. Sopwith, England
SCEPTRE, Hugh Goodson et al. England

COURT TENNIS

National Champions

Richard D. Sears, Boston A. A.
 Burke Warren, Boston A. A.
 Spalding de Garmendia, R. and T. Club
 Lawrence M. Stockton, Boston A. A.
 George R. Fearing, Jr., Boston A. A.
 Lawrence M. Stockton, Boston A. A.
 Estace H. Miles, England
 Joshua Crane, Boston A. A.
 Charles E. Sands, R. and T. Club
 Gould, Philadelphia R. C.
 tournaments
 Gould, Philadelphia R. C.
 Suydam Cutting, R. and T. Club
 George Huband, England, and Chicago R. C.
 Witt Morgan, R. and T. Club

1930 Lord Aberdare, England
1931-32 William C. Wright, Philadelphia
1933 James H. Van Alen, R. and T. Club
1934-37 Ogden Phipps, R. and T. Club
1938 James H. Van Alen, R. and T. Club
1939 Ogden Phipps, R. and T. Club
1940 James H. Van Alen, R. and T. Club
1941 Alastair B. Martin, R. and T. Club
1942-45 No tournaments
1946 Robert Grant, III, R. and T. Club
E. M. Beals, Jr., Boston
1948-49 Ogden Phipps, Roslyn, N. Y.
1950-56 Alastair B. Martin, R. and T. Club
1957-58 Northrup Knox, Buffalo
1959 James Postwick, New York

COLLEGE COLORS AND NICKNAMES

Air Force—Silver-Blue; Falcons
Akron—Blue-Gold; Zips
Alabama—Crimson-White; Crimson Tide
Alfred—Purple-Gold; Saxons
Amherst—Purple-White; Lord Jeffs
Arizona—Crimson-Blue; Wildcats
Arizona State (Tempe)—Maroon-Gold; Sun Devils
Arkansas—Cardinal-White; Razorbacks
Army—Black-Gold-Gray; Cadets
Auburn—Orange-Blue; Tigers
Baylor—Green-Gold; Bears
Boston Coll.—Maroon-Gold; Eagles
Boston U.—Scarlet-White; Terriers
Bowdoin—White; Polar Bears
Bowling Green—Brown-Orange; Falcons
Bradley—Cardinal-White; Braves
Brigham Young—Blue-White; Cougars
Brooklyn—Maroon-Gold; Kingsmen
Brown—Brown-White; Bruins
Bucknell—Orange-Blue; Bisons
Buffalo—Blue-White; Bulls
Butler—Blue-White; Bulldogs
California—Blue-Gold; Golden Bears
Canisius—Blue-Gold; Griffins
Carnegie Tech—Tartan Plaid; Tartans
Catholic—Red-Black; Cardinals
Centre—Gold-White; Colonels
Chicago—Maroon; Maroons
Cincinnati—Red-Black; Bearcats
Citadel—Blue-White; Bulldogs
City Coll. of N. Y.—Lavender; Beavers
Clemson—Purple-Orange; Tigers
Coast Guard—Blue-White; Cadets
Colgate—Maroon; Red Raiders
Coll. of Pacific—Orange-Black; Tigers
Colorado—Silver-Gold; Buffaloes
Columbia—Blue-White; Lions
Connecticut—Blue-White; Huskies, Uconns
Cornell—Carnelian-White; Big Red
Creighton—White-Blue; Blue Jays
Dartmouth—Green; Indians
Davidson—Red-Black; Wildcats
Dayton—Red-Blue; Flyers
Delaware—Blue-Gold; Blue Hens
Denver—Red-Gold; Pioneers
DePaul—Scarlet-Blue; Blue Demons
Detroit—Cardinal-White; Titans
Drake—White-Blue; Bulldogs
Duke—Blue-White; Blue Devils
Duquesne—Red-Blue; Dukes
Florida—Orange-Blue; Gators
Franklin & Marshall—Blue-White; Diplomats
Fordham—Maroon; Rams
Furman—Purple-White; Purple Hurricane
Georgetown—Blue-Gray; Hoyas
George Washington—Buff-Blue; Colonials
Georgia—Red-Black; Bulldogs
Georgia Tech—White-Gold; Yellow Jackets
Gonzaga—Blue-White; Bulldogs
Hamilton—Buff-Blue; Continentals
Hampden-Sydney—Garnet-Gray; Tigers
Hardin-Simmons—Purple-Gold; Cowboys
Harvard—Crimson; The Crimson
Hobart—Orange-Purple; Statesmen

Holy Cross—Purple; Crusaders
Houston—Scarlet-White; Cougars
Howard—Blue-White; Bisons
Idaho—Silver-Gold; Vandals
Illinois—Orange-Blue; Illini
Indiana—Cream-Crimson; Hoosiers
Iowa—Gold-Black; Hawkeyes
Iowa State—Cardinal-Gold; Cyclones
Johns Hopkins—Blue-Black; Blue Jays
Kansas—Crimson-Blue; Jayhawkers
Kansas State—Purple-White; Wildcats
Kentucky—Blue-White; Wildcats
Knox—Purple-Gold; Siwashers
Lafayette—Maroon-White; Leopards
La Salle—Blue-Gold; Explorers
Lehigh—Brown-White; Engineers
Louisiana State—Purple-Gold; Tigers
Louisville—Cardinal-Black; Cardinals
Loyola (Ill.)—Maroon-Gold; Ramblers
Maine—Blue-White; Black Bears
Manhattan—Green-White; Jaspers
Marquette—Blue-Gold; Warriors
Maryland—Red-White; Terrapins
Massachusetts—Maroon-White; Redmen
Merchant Marine—Blue-Gray; Mariners
Miami (Fla.)—Orange-Green-White; Hurricanes
Miami (Ohio)—Red-White; Redskins
Michigan—Maize-Blue; Wolverines
Michigan State—Green-White; Spartans
Middlebury—Blue-White; Panthers
Minnesota—Maroon-Gold; Gophers
Mississippi—Red-Blue; Rebels
Mississippi State—Maroon-White; Maroons
Missouri—Black-Gold; Tigers
M.I.T.—Cardinal-Gray; Beavers
Montana—Copper-Silver-Gold; Grizzlies
Navy—Blue-Gold; Midshipmen
Nebraska—Scarlet-Cream; Cornhuskers
Nevada—Silver-Blue; Wolfpack
New Hampshire—Blue-White; Wildcats
New Mexico—Cherry-Silver; Lobos
New York U.—Violet; Violets
Niagara—Purple-White; Purple Eagles
North Carolina—Blue-White; Tar Heels
North Carolina State—Scarlet-White; Wolfpack
North Dakota—Green-White; Sioux
Northeastern—Red-Black; Huskies
Northwestern—Purple-White; Wildcats
Notre Dame—Blue-Gold; Fighting Irish
Occidental—Orange-Black; Bengals
Ohio State—Scarlet-Gray; Buckeyes
Ohio U.—Green-White; Bobcats
Oklahoma—Red-White; Sooners
Oklahoma State—Orange-Black; Cowboys
Omaha—Red-Black; Indians
Oregon—Yellow-Green; Webfoots
Oregon State—Orange-Black; Beavers
Penn State—Blue-White; Nittany Lions
Pennsylvania—Red-Blue; Quakers
Pittsburgh—Blue-Gold; Panthers
Princeton—Orange-Black; Tigers
Providence—Black-White; Friars
Purdue—Gold-Black; Boilermakers
Rhode Island—Blue-White; Rams
Rice—Blue-Gray; Owls

Richmond—Red-Blue; Spiders
Rochester—Yellow; Yellowjackets
Rollins—Blue-Gold; Tars
R.P.I.—Cherry-White; Engineers
Rutgers—Scarlet; The Scarlet
St. Francis (N. Y.)—Red-Blue; Tars
St. John's (N. Y.)—Red-White; Red
St. Joseph's (Pa.)—Crimson-Gray
St. Lawrence—Scarlet-Brown; Lancers
St. Louis—Blue-White; Billikens
St. Mary's (Calif.)—Red-Blue; Gaels
San Francisco—Green-Gold; Dons
San Jose State—Gold-White; Spartans
Santa Clara—Cardinal-White; Broncos
Seattle—Maroon-White; Chieftains
Seton Hall—Blue-White; Pirates
Sewanee—Purple-White; Tigers
South Carolina—Garnet-Black; Gamecocks
South Dakota—Scarlet-White; Coyotes
So. California—Cardinal-Gold; Trojans
So. Methodist—Red-Blue; Mustangs
Springfield—Maroon-White; Maroons
Stanford—Cardinal-White; Indians
Swarthmore—Garnet; Little Quakers
Syracuse—Orange; Orangemen
Temple—Cherry-White; Owls
Tennessee—Orange-White; Vols
Texas—Orange-White; Longhorns
Texas A. & M.—Maroon-White; Aggies
Texas Christian—Purple-White; Frogs
Texas Tech—Scarlet-Black; Red Raiders
Toledo—Blue-Gold; Rockets
Tufts—Blue-Brown; Jumbos
Tulane—Green-Blue; Green Wave
Tulsa—Crimson-Blue-Gold; Golden Hurricane
Tuskegee—Gold-Crimson; Golden Tigers
U.C.L.A.—Blue-Gold; Bruins
Utah—Crimson-White; Utes
Utah State—Blue-White; Aggies
Vanderbilt—Gold-Black; Commodores
Vermont—Green-Gold; Catamounts
Villanova—Blue-White; Wildcats
Virginia—Blue-Orange; Cavaliers
V.M.I.—Red-White-Yellow; Keydets
V.P.I.—Orange-Maroon; Gobblers
Wake Forest—Gold-Black; Demon Deacons
Washington & Lee—Blue-White; Generals
Washington (Mo.)—Myrtle-Maroon; Bears
Washington (Wash.)—Purple-Gold; Huskies
Washington State—Crimson-Gray; Cougars
Wayne State—Green-Gold; Tartars
Wesleyan—Cardinal-Black; Cardinals
Western Reserve—Red-White; Red
W. Virginia—Gold-Blue; Mountaineers
Wichita—Black-Gold; Wheatshockers
William & Mary—Green-Gold-Silver; Indians
Williams—Royal Purple; Ephraims
Wisconsin—Cardinal; Badgers
Wyoming—Brown-Gold; Cowboys
Yale—Blue; Bulldogs, Elis

TRACK AND FIELD

NING, jumping, hurdling and throwing weights—track and field sports, in words—are as natural to boys and men as eating, drinking and breathing. Organized competition in this form goes back beyond the Cave Man. Organized competition begins with the recorded Olympic Games in Greece, B. C., when Coroebus of Elis won the event on the program, a race of approximately 200 yards. The Olympic Games, an ever-widening program of events, ended until “the glory that was Rome” had faded and “the grandeur that was Rome” was tarnished, and finally were ended by decree of Emperor Theodosius in A. D. 394. The Taltteann Games in Ireland are supposed to have antedated the Olympic Games by some centuries, but have no records of the specific events and winners thereof.

Professional contests of speed and endurance were popular at all times and in all lands, but the widespread competition of amateur athletes in track and field

sports is a comparatively modern development. The first organized amateur athletic meet of record was sponsored by the Royal Military Academy at Woolwich, England, in 1849. Oxford and Cambridge track and field rivalry began in 1864 and the English amateur championships were established in 1866. In the United States such organizations as the New York Athletic Club and the Olympic Club of San Francisco conducted track and field meets in the 1870's, and a few colleges joined to sponsor a meet in 1874. The success of the college meet led to the formation of the Intercollegiate Association of Amateur Athletes of America and the holding of an annual set of championship games beginning in 1876.

Many athletic clubs joined the National Association of Amateur Athletes of America, formed in 1879, but dissension broke up this organization and the Amateur Athletic Union, organized in 1888, has been the ruling body in American amateur athletics since that time.

Track and Field Statistics

Source: Amateur Athletic Union of the United States.

MEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation as of Sept. 1, 1960

RUNNING

Record	Holder	Home country	Where made	Date
100 yd.	Melvin E. Patton	United States	Fresno, Calif.	May 15, 1948
200 yd.	Hector Hogan	Australia	Sydney	Mar. 13, 1954
400 yd.	James Golliday	United States	Evanston, Ill.	May 14, 1955
800 yd.	Leamon King	United States	Fresno, Calif.	May 12, 1956
1 mi.	David Sime	United States	Durham, N. C.	May 19, 1956
2 mi.	David Sime	United States	Sanger, Calif.	June 9, 1956
3 mi.	David Sime	United States	Raleigh, N. C.	May 18, 1957
4 mi.	Bobby Morrow	United States	Austin, Tex.	June 14, 1957
5 mi.	Ray Norton	United States	San Jose, Calif.	April 12, 1958
6 mi.	Bill Woodhouse	United States	Abilene, Tex.	May 5, 1959
7 mi.	Roscoe Cook	United States	Modesto, Calif.	May 30, 1959
8 mi.	David Sime	United States	Sanger, Calif.	June 9, 1956
9 mi.	Glenn Davis	United States	Berkeley, Calif.	June 14, 1958
10 mi.	Tom Courtney	United States	Los Angeles	May 24, 1957
11 mi.	Herb Elliott	Australia	Dublin	Aug. 6, 1958
12 mi.	Albert Thomas	Australia	Dublin	Aug. 7, 1958
13 mi.	Albert Thomas	Australia	Dublin	July 9, 1958
14 mi.	Sandor Iharos	Hungary	Budapest	July 15, 1956
15 mi.	Emil Zatopek	Czechoslovakia	Boleslav, Czech.	Sept. 29, 1951
16 mi.	Emil Zatopek	Czechoslovakia	Celakovice, Czech.	Oct. 29, 1955
17 mi.	Emil Zatopek	Czechoslovakia	Boleslav, Czech.	Sept. 29, 1951

WALKING

Record	Holder	Home country	Where made	Date
12 m. 45 s.	Werner Hardmo	Sweden	Malmö	Sept. 1, 1945
34 m. 32.8 s.	J. Dolezal	Czechoslovakia	Manchester, Eng.	Oct. 15, 1955
48 m. 15.2 s.	Werner Hardmo	Sweden	Kumla, Sweden	Sept. 9, 1945
1 h. 10 m. 45.8 s.	J. Dolezal	Czechoslovakia	Boleslav, Czech.	April 30, 1954
2 h. 31 m. 33 s.	Anatoli Vedjakov	U.S.S.R.	Moscow	Aug. 23, 1958
4 h. 7 m. 11 s.	S. Lobastov	U.S.S.R.	Moscow	Aug. 23, 1958
8 mi. 1025 yd.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1945
16 mi. 743 yd.	Anatoli Egorov	U.S.S.R.	Leningrad	July 15, 1959

RUNNING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
100 meters	10 s.	Armin Hary	Germany	Zurich, Switzerland	June 21, 1912
		Harry Jerome	Canada	Saskatoon, Canada	July 15, 1912
200 m.	20 s.	David Sime	United States	Sanger, Calif.	June 9, 1912
400 m.	45.2 s.	Louis Jones	United States	Los Angeles	June 30, 1912
800 m.	1 m. 45.7 s.	Roger Moens	Belgium	Oslo	Aug. 3, 1912
1,000 m.	2 m. 17.8 s.	Dan Waern	Sweden	Karlstad, Sweden	Aug. 21, 1912
1,500 m.	3 m. 36 s.	Herb Elliott	Australia	Goteborg, Sweden	Aug. 28, 1912
2,000 m.	5 m. 2.2 s.	Istvan Rozsavoigyl	Hungary	Budapest	Oct. 1, 1912
3,000 m.	7 m. 52.8 s.	Gordon Pirie	Great Britain	Malmo, Sweden	Sept. 6, 1912
5,000 m.	13 m. 35 s.	Vladimir Kuts	U.S.S.R.	Rome	Oct. 13, 1912
10,000 m.	28 m. 30.4 s.	Vladimir Kuts	U.S.S.R.	Moscow	Sept. 11, 1912
20,000 m.	59 m. 51.6 s.	Emil Zatopek	Czechoslovakia	Boleslav	Sept. 29, 1912
25,000 m.	1 h. 16 m. 36.4 s.	Emil Zatopek	Czechoslovakia	Celakovice, Czech.	Oct. 29, 1912
30,000 m.	1 h. 35 m. 1 s.	Albert Ivanov	U.S.S.R.	Moscow	June 6, 1912
1 hr.	20,052 meters 40 cm.	Emil Zatopek	Czechoslovakia	Boleslav	Sept. 29, 1912
3,000 m. steeplechase	8 m. 32 s.	Jerzy Chromik	Poland	Warsaw	Aug. 2, 1912

WALKING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
3,000 m.	11 m. 51.8 s.	Werner Hardmo	Sweden	Malmo	Sept. 1, 1912
5,000 m.	20 m. 26.8 s.	Werner Hardmo	Sweden	Kumla	July 31, 1912
10,000 m.	42 m. 18.3 s.	Grigory Panichkin	U.S.S.R.	Stalinabad	May 7, 1912
15,000 m.	1 h. 5 m. 18 s.	Leonid Spirin	U.S.S.R.	Dnepropetrovsk	Sept. 24, 1912
20,000 m.	1 h. 27 m. 5 s.	Vladimir Golubnichy	U.S.S.R.	Simferopol, U.S.S.R.	Sept. 23, 1912
30,000 m.	2 h. 17 m. 16.8 s.	Anatoli Egorov	U.S.S.R.	Leningrad	July 15, 1912
50,000 m.	4 h. 16 m. 8.6 s.	S. Lobastov	U.S.S.R.	Moscow	Aug. 23, 1912
1 hr.	13,812 m.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1912
2 hr.	26,249 m.	Anatoli Egorov	U.S.S.R.	Leningrad	July 15, 1912

HURDLES (10 hurdles)

Event	Record	Holder	Home country	Where made	Date
120 yd.	13.2 s.	Martin Lauer	Germany	Zurich, Switzerland	July 7, 1912
220 yd.	21.9 s.	Don Styron	United States	Baton Rouge, La.	April 2, 1912
440 yd.	49.7 s.	Gerhardus Potgieter	South Africa	Cardiff, Wales	July 22, 1912
110 m.	13.2 s.	Martin Lauer	Germany	Zurich, Switzerland	July 7, 1912
200 m.	21.9 s.	Don Styron	United States	Baton Rouge, La.	April 2, 1912
400 m.	49.2 s.	Glenn Davis	United States	Budapest	Aug. 6, 1912

RELAY RACES

Event	Record	Holder	Home country	Where made	Date
440 yd. (4 x 110)	39.6 s.	University of Texas	United States	Modesto, Calif.	May 30, 1912
		(Wally Wilson, Eddie Southern, Hollis Gainey, Ralph Alsbaugh)			
880 yd. (4 x 220)	1 m. 22.6 s.	Abilene Christian	United States	Modesto, Calif.	May 31, 1912
		(Bill Woodhouse, Jim Segrist, George Peterson, Bobby Morrow)			
1 mi. (4 x 440 yd.)	3 m. 7.3 s.	National Team	United States	Los Angeles	Nov. 4, 1912
		(C. Jenkins, L. Spurrier, T. Courtney, L. Jones)			
2 mi. (4 x 880)	7 m. 20.9	University of California	United States	Los Angeles	May 16, 1912
		(Maynard Orme, Jerry Siebert, Jack Yerman, Don Bowden)			
4 mi. (4 x 1 mi.)	16 m. 25.2 s.	National Team	Hungary	Budapest	Sept. 29, 1912
		(Lajos Kovacs, Bela Szekeres, Sandhor Iharos, Istvan Rozsavoigyl)			

RELAY RACES—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
400 m. (4 x 100)	39.5 s.	National Team	United States	Melbourne	Dec. 1, 1912
		(T. Baker, L. King, T. Murchison, R. Morrow)			
		National Team	West Germany	Cologne	Aug. 29, 1912
		(M. Steinbach, M. Lauer, H. Futterer, M. Germar)			
800 m. (4 x 200)	1 m. 22.6 s.	Abilene Christian	United States	Modesto, Calif.	May 31, 1912
		(Bill Woodhouse, Jim Segrist, George Peterson, Bobby Morrow)			
1,600 m. (4 x 400)	3 m. 3.9 s.	National Team	Jamaica, B.W.I.	Helsinki	July 27, 1912
		(A. Wint, L. Laing, H. McKenley, G. Rhoden)			
3,200 m. (4 x 800)	7 m. 15.8 s.	National Team	Belgium	Brussels	Aug. 8, 1912
		(A. Bailleux, A. Langenus, E. Leva, R. Moens)			
6,000 m. (4 x 1,500)	15 m. 11.4 s.	National Team	East Germany	Poznan, Poland	Aug. 9, 1912
		(S. Herman, K. Richtzenhain, H. Rein nagel, S. Valentin)			

FIELD EVENTS

Event	Record	Holder	Home country	Where made	Date
p.....	7 ft. 3¼ in.	John Thomas.....	United States.....	Palo Alto, Calif.....	July 1, 1960
mp.....	26 ft. 8¼ in.	Jesse Owens.....	United States.....	Ann Arbor.....	May 25, 1935
o & jump.....	54 ft. 9½ in.	Oleg Fedoseyev.....	U.S.S.R.....	Nalchik, U.S.S.R.....	May 3, 1959
t.....	15 ft. 9¼ in.	Don Bragg.....	United States.....	Palo Alto, Calif.....	July 2, 1960
.....	65 ft. 7 in.	Bill Nieder.....	United States.....	Austin, Tex.....	April 2, 1960
row.....	196 ft. 6½ in.	Edmund Piatkowski.....	Poland.....	Warsaw.....	June 14, 1959
row.....	282 ft. 3½ in.	Al Cantello.....	United States.....	Compton, Calif.....	June 5, 1959
throw.....	225 ft. 4 in.	Harold Connolly.....	United States.....	Bakersfield, Calif.....	June 20, 1958

DECATHLON

Points	Holder	Home country	Where made	Date
.....	Rafer Johnson.....	United States.....	Eugene, Ore.....	July 8-9, 1960

WOMEN'S WORLD RECORDS

RUNNING

Event	Record	Holder	Home country	Where made	Date
.....	10.3 s.	Marlene Mathews.....	Australia.....	Sydney.....	Mar. 20, 1958
.....	23.2 s.	Betty Cuthbert.....	Australia.....	Hobart, Australia.....	Mar. 7, 1960
.....	53.7 s.	Maria Itkina.....	U.S.S.R.....	Krasnodar, U.S.S.R.....	Sept. 12, 1959
.....	2 m. 6.6 s.	Nina Otkalenko.....	U.S.S.R.....	Moscow.....	June 10, 1956
.....	7.2 s.	Betty Cuthbert.....	Australia.....	Sydney.....	Feb. 27, 1960
.....	11.3 s.	Shirley de la Hunty.....	Australia.....	Warsaw.....	Aug. 4, 1955
.....	.....	Vera Krepkina.....	U.S.S.R.....	Kiev, U.S.S.R.....	Sept. 13, 1958
.....	23.2 s.	Betty Cuthbert.....	Australia.....	Sydney.....	Sept. 16, 1956
.....	53.4 s.	Betty Cuthbert.....	Australia.....	Hobart, Australia.....	Mar. 7, 1960
.....	2 m. 5 s.	Maria Itkina.....	U.S.S.R.....	Krasnodar, U.S.S.R.....	Sept. 12, 1959
.....	.....	Nina Otkalenko.....	U.S.S.R.....	Zagreb, Yugoslavia.....	Sept. 24, 1956

RELAY RACES

x 110).....	45.3 s.	National Team.....	Gr. Brit. & No. Ire.....	Cardiff, Wales.....	July 26, 1958
(H. Young, J. Paul, D. Hyman, V. Weston)					
x 220).....	1 m. 36 s.	National Team.....	Germany.....	Leipzig.....	July 26, 1958
(Hannelore Sadau, Gisela Birkemeyer, Barbara Mayer, Christa Studnick)					
x 100).....	44.5 s.	National Team.....	Australia.....	Melbourne.....	Dec. 1, 1956
(S. de la Hunty, N. Croker, F. Mellor, B. Cuthbert)					
x 200).....	1 m. 36 s.	National Team.....	Germany.....	Leipzig.....	July 26, 1958
(Hannelore Sadau, Gisela Birkemeyer, Barbara Mayer, Christa Studnick)					
3 x 800).....	6 m. 27.4 s.	National Team.....	U.S.S.R.....	Kiev, U.S.S.R.....	Sept. 9, 1958
(Lyubov Yanvareva, Dora Kozlova, Lyudmila Lysenko-Shevtsova)					
x 880).....	6 m. 36.2 s.	National Team.....	Hungary.....	Tata.....	July 21, 1954
(A. Bacskai, A. Oros, A. Kazi)					

HURDLES

.....	10.6 s.	Zenta Gastl.....	Germany.....	Freuchen.....	July 29, 1956
.....	.....	Galina Bystrova.....	U.S.S.R.....	Krasnodar, U.S.S.R.....	Sept. 8, 1958
.....	.....	Norma Thrower.....	Australia.....	Brisbane, Australia.....	Sept. 21, 1959

FIELD EVENTS

.....	6 ft. 3¼ in.	Yolanda Balas.....	U.S.S.R.....	Bucharest, Rumania.....	June 6, 1960
p.....	20 ft. 10 in.	Elzbieta Krzeskanska.....	Poland.....	Budapest.....	Aug. 20, 1956
.....	.....	Elzbieta Krzeskanska.....	Poland.....	Melbourne.....	Nov. 27, 1956
.....	56 ft. 7 in.	Tamara Press.....	U.S.S.R.....	Nalchik, U.S.S.R.....	April 26, 1959
ow.....	187 ft. 1½ in.	Nina Dumbadze.....	U.S.S.R.....	Tbilisi, U.S.S.R.....	Oct. 18, 1952
ow.....	195 ft. 2½ in.	Elvira Ozolina.....	U.S.S.R.....	Bucharest, Rumania.....	June 5, 1960

PENTATHLON

Points	Holder	Home country	Where made	Date
.....	Irina Press.....	U.S.S.R.....	Krasnodar, U.S.S.R.....	Sept. 13-14, 1959

WEIGHTLIFTING

National A. A. U. Heavyweight Champions

	Lbs.		Lbs.		Lbs.
Tyler.....	760	1939 Steve Stanko.....	895	1950 John Davis.....	1010
am Rohrer.....	1045	1940 Steve Stanko.....	950½	1951 John Davis.....	1062
rt Manger.....	1001	1941 Jonn Davis.....	1009¼	1952 John Davis.....	1002½
am Rohrer.....	784½	1942 John Davis.....	905	1953 John Davis.....	990
rt Manger.....	704	1943 John Davis.....	940	1954 Norbert Schemansky.....	1050
Mallo.....	760½	1944 Frank Schofro.....	850	1955 Paul Anderson.....	1145
am Good.....	1210	1945 H. G. Curtis.....	855	1956 Paul Anderson.....	1175
am Good.....	1205	1946 John Davis.....	916	1957 Dave Ashman.....	955
Grimek.....	786½	1947 John Davis.....	900	1958 Dave Ashman.....	1000
d Mayor.....	835	1948 John Davis.....	1025	1959 Dave Ashman.....	1040
e Stanko.....	850	1949 Norbert Schemansky.....	885		

HISTORY OF THE RECORD FOR THE MILE RUN

Time	Athlete	Country	Year	Where Made
4:56.0	Charles Lawes	England	1864	England
4:36.5	Richard Webster	England	1865	England
4:29.0	William Chinnery	England	1868	England
4:28.8	W. C. Gibbs	England	1868	England
4:26.0	Walter Slade	England	1874	England
4:24.5	Walter Slade	England	1875	London, England
4:23.2	Walter George	England	1880	London, England
4:21.4	Walter George	England	1882	London, England
4:19.4	Walter George	England	1882	London, England
4:18.4	Walter George	England	1884	Birmingham, England
4:18.2	Fred Bacon	Scotland	1894	Edinburgh, Scotland
4:17.0	Fred Bacon	Scotland	1895	London, England
4:15.6	Thomas Conneff	United States	1895	Travers Island, N. Y.
4:15.4	John Paul Jones	United States	1911	Cambridge, Mass.
4:14.4	John Paul Jones	United States	1913	Cambridge, Mass.
4:12.6	Norman Taber	United States	1915	Cambridge, Mass.
4:10.4	Paavo Nurmi	Finland	1923	Stockholm, Sweden
4:09.2	Jules Ladoumègue	France	1931	Paris, France
4:07.6	Jack Lovelock	New Zealand	1933	Princeton, N. J.
4:06.8	Glenn Cunningham	United States	1934	Princeton, N. J.
4:06.4	Sydney Wooderson	England	1937	London, England
4:06.2	Gunder Hagg	Sweden	1942	Göteborg, Sweden
4:06.2	Arne Andersson	Sweden	1942	Stockholm, Sweden
4:04.6	Gunder Hagg	Sweden	1942	Stockholm, Sweden
4:02.6	Arne Andersson	Sweden	1943	Göteborg, Sweden
4:01.6	Arne Andersson	Sweden	1944	Malmö, Sweden
4:01.4	Gunder Hagg	Sweden	1945	Malmö, Sweden
3:59.4	Roger Bannister	England	1954	Oxford, England
3:58.0	John Landy	Australia	1954	Turku, Finland
3:57.2	Derek Ibbotson	England	1957	London, England
3:54.5	Herb Elliott	Australia	1958	Dublin, Ireland

Runs Mile in 3:58.6—Finishes Fifth in Race!

Until May 6, 1954, the day Roger Bannister of England ran the mile in 3 minutes 59.4 seconds, many observers clung to the belief it was impossible for man to dip below four minutes.

The progress man has made since is best illustrated by the performance of Albert Thomas, an Australian, four years after Bannister's epic feat. Competing in Dublin, Ireland, on Aug. 6, 1958, Thomas went by the finish line in 3:58.6, four-fifths of a second faster than Bannister's clocking, and netted no more than a dismal fifth place in the race! It was in this race that Herb Elliott, Thomas' countryman, shattered the world record with a time of 3:54.5.

By the end of September, 1960, the race had been run under four minutes a total of 66 times by 26 men. Led by Elliott, who had 17 such performances, five Australian runners had accounted for 31 of the efforts. Four races under four minutes have been recorded by United States athletes: Don Bowden of California did 3:58.7 on June 1, 1957; Dyrol Burleson of Oregon clocked 3:58.6 on April 23, 1960; Jim Beatty of North Carolina achieved 3:58.0 on May 28, 1960, in a race in which Burleson was second in 3:58.6.

WORLD'S FASTEST MILES

Time	Athlete	Country	Date	Where Made
3:54.5	Herb Elliott	Australia	Aug. 6, 1958	Dublin, Ireland
3:55.4	Herb Elliott	Australia	Sept. 3, 1958	London, England
3:55.9a	Merv Lincoln	Australia	Aug. 6, 1958	Dublin, Ireland
3:56.5	Siegfried Valentin	Germany	May 28, 1959	Frankfurt, Germany
3:57.0	Herb Elliott	Australia	Sept. 23, 1960	Dublin, Ireland
3:57.2	Derek Ibbotson	England	July 19, 1957	London, England
3:57.5b	Ron Delany	Ireland	Aug. 6, 1958	Dublin, Ireland
3:57.5c	Murray Halberg	New Zealand	Aug. 6, 1958	Dublin, Ireland
3:57.8	Herb Elliott	Australia	May 16, 1958	Los Angeles, Calif.
3:57.9	Herb Elliott	Australia	June 21, 1958	Bakersfield, Calif.
3:58.0	John Landy	Australia	June 21, 1954	Turku, Finland
3:58.0	Herb Elliott	Australia	Aug. 29, 1958	Malmö, Sweden
3:58.0	Jim Beatty	United States	May 28, 1960	Modesto, Calif.
3:58.1	Herb Elliott	Australia	June 6, 1958	Compton, Calif.
3:58.4	Derek Ibbotson	England	June 15, 1957	Glasgow, Scotland
3:58.5	Dan Waern	Sweden	Sept. 4, 1957	Malmö, Sweden
3:58.5a	Merv Lincoln	Australia	June 21, 1958	Bakersfield, Calif.

aFinished second. bFinished third. cFinished fourth.

BOXING

ETHER it be called pugilism, prize fighting or boxing, there is no tracing west Science" to any definite source. of rivals exchanging blows for fun, or money go back to earliest re- history and classical legend. There mixture of boxing and wrestling the "pancratium" in the ancient Games and in such contests the belabored one another with hands d with heavy leather wrappings that sometimes studded with metal. More ne Olympic competitor lost his life brutal exercise.

There was little law or order in pugilism Jack Broughton, one of the early ons of England, drew up a set of for the game in 1743. Broughton, "the father of English boxing," also ited with having invented boxing However, these gloves—or "mufflers" y were called—were used only in g "the manly art of self-defense" training bouts. All professional

championship fights were contested with "bare knuckles" until 1892, when John L. Sullivan lost the heavyweight champion- ship of the world to James J. Corbett in New Orleans in a bout in which both con- testants wore regulation gloves.

The Broughton rules were superseded by the London Prize Ring Rules of 1838. The 8th Marquis of Queensberry, with the help of John G. Chambers, put forward the "Queensberry Rules" in 1866, a code that called for gloved contests. Amateurs took quickly to the Queensberry Rules, the professionals slowly.

There is no official international set of rules for boxing even today. Amateur organizations set rules for amateurs in different countries and professional rules set by boxing commissions vary even in different sections of the United States, but the variations are for the most part minor. A prize fighter doesn't have to change his style greatly to ply his trade anywhere in the world.

Boxing Statistics

From *Fleischer's All-Time Record Book and Encyclopedia of Boxing*, published and copyrighted by The Ring Book Shop, Inc., Madison Square Garden, New York, N. Y.

Boxing's Biggest Gates

on foul.		ND—No decision.	(1st)—First bout.	(2d)—Second bout:	(3d)—Third bout.
Winner, weight	Loser, weight		Rounds	Site	Receipts Attendance.
927 Tunney (189½)-Dempsey (192½) (2d)...			10	Soldier Field, Chicago.....	\$2,658,660 104,943
946 Louis (207)-Conn (187) (2d).....		KO 8	10	Yankee Stadium, New York.....	1,925,564 45,266
926 Tunney (189½)-Dempsey (190) (1st)....			10	Sesquicentennial Sldm., Phila....	1,895,733 120,757
921 Dempsey (188)-Carpentier (172).....		KO 4	2	Boyle's 30 Acres, Jersey City.....	1,789,238 80,000
923 Dempsey (192½)-Firpo (216½).....		KO 2	2	Polo Grounds, New York.....	1,188,603 82,000
927 Dempsey (194½)-Sharkey (196).....		KO 7	7	Yankee Stadium, New York.....	1,083,530 75,000
938 Louis (198½)-Schmeling (193) (2d)....		KO 1	1	Yankee Stadium, New York.....	1,015,012 70,000
935 Louis (199½)-Max Baer (210½).....		KO 4	4	Yankee Stadium, New York.....	1,000,832 88,150
955 Marciano (188½)-Moore (188).....		KO 9	9	Yankee Stadium, New York.....	948,117 61,574
948 Louis (213½)-Walcott (194½) (2d)....		KO 11	11	Yankee Stadium, New York.....	841,739 42,667
960 Patterson (190)-Johansson (194½) (2d).		KO 5	5	Polo Grounds, New York.....	824,891 31,892
951 Robinson (157½)-Turpin (159) (2d)....		KO 10	10	Polo Grounds, New York.....	767,626 61,370
930 Schmeling (188)-Sharkey (197) (1st)....		WF 4	4	Yankee Stadium, New York.....	749,935 79,222
937 Louis (197½)-Braddock (197).....		KO 8	8	Comiskey Park, Chicago.....	715,470 45,500
928 Tunney (192)-Heeney (203½).....		KO 11	11	Yankee Stadium, New York.....	691,014 45,890
941 Louis (202½)-Nova (202½).....		KO 6	6	Polo Grounds, New York.....	583,711 56,549
957 Basilio (153½)-Robinson (160) (1st)....		15	15	Yankee Stadium, New York.....	556,467 38,072
956 Schmeling (192)-Louis (198) (1st)....		KO 12	12	Yankee Stadium, New York.....	547,541 42,088
934 Marciano (187½)-Charles (185½) (1st).		15	15	Yankee Stadium, New York.....	543,092 47,585
924 Wills (217)-Firpo (224½).....		ND 12	12	Boyle's 30 Acres, Jersey City.....	509,135 70,000
952 Marciano (184)-Walcott (196).....		KO 13	13	Municipal Sldm., Phila.....	504,645 40,379
959 Johansson (196)-Patterson (182) (1st)...		KO 3	3	Yankee Stadium, New York.....	469,650 18,215
926 Delaney (166½)-Berlenbach (174½) (3d).		15	15	Ebbets Field, Brooklyn.....	461,789 49,186
923 Leonard (134)-Tendler (133½) (2d)....		15	15	Yankee Stadium, New York.....	452,648 58,519
919 Dempsey (187)-Willard (245).....		KO 3	3	Toledo, Ohio.....	452,224 19,650
911 Louis (199½)-Conn (174) (1st).....		KO 13	13	Polo Grounds, New York.....	451,743 60,071
933 Marciano (185)-LaStarza (184½) (2d)...		KO 11	11	Polo Grounds, New York.....	435,817 44,562
922 Sharkey (205)-Schmeling (188) (2d)....		15	15	Long Island City Bowl, N. Y.....	432,465 61,863
924 Max Baer (209½)-Carnera (263½).....		KO 11	11	Long Island City Bowl, N. Y.....	428,000 56,000
927 Graziano (154½)-Zale (159) (2d)....		KO 6	6	Chicago Stadium.....	422,918 18,547
922 Maxim (173)-Robinson (157½).....		KO 14	14	Yankee Stadium, New York.....	421,615 47,983
919 Sharkey (192)-Stribling (182).....		10	10	Flamingo Park, Miami Beach, Fla..	405,000 40,000
933 Firpo (214)-Willard (242).....		KO 8	8	Boyle's 30 Acres, Jersey City.....	390,837 80,000
933 Firpo (212)-McAuliffe (200).....		KO 3	3	Yankee Stadium, New York.....	385,040 31,000
933 Willard (245)-Floyd Johnson (195).....		KO 11	11	Yankee Stadium, New York.....	378,902 65,000
919 Schmeling (187)-Uzcudun (192½) (1st).		15	15	Yankee Stadium, New York.....	367,862 54,685
922 Leonard (134½)-Tendler (134½) (1st).		ND 12	12	Boyle's 30 Acres, Jersey City.....	362,654 34,330
924 Marciano (187)-Charles (192½) (2d)....		KO 8	8	Yankee Stadium, New York.....	

HISTORY OF WORLD HEAVYWEIGHT CHAMPIONSHIP FIGHTS

(Bouts in which a new champion was crowned)

Date	Where held	Winner, weight, age	Loser, weight, age	Rounds	Referee
Sept. 7, 1892	New Orleans, La.	James J. Corbett, 178 (26)	John L. Sullivan, 212 (33)	21	Prof. John T.
Mar. 17, 1897	Carson City, Nev.	Bob Fitzsimmons, 167 (34)	James J. Corbett, 183 (30)	KO 14	George Sile
June 9, 1899	Coney Island, N. Y.	(a) James J. Jeffries, 206 (24)	Bob Fitzsimmons, 167 (37)	KO 11	George Sile
Feb. 23, 1906	Los Angeles	(b) Tommy Burns, 180 (24)	Marvin Hart, 188 (29)	20	James J. Je
Dec. 26, 1908	Sydney, N. S. W.	Jack Johnson, 196 (30)	Tommy Burns, 176 (27)	KO 14	Hugh McLe
April 5, 1915	Havana, Cuba	Jess Willard, 230 (31)	Jack Johnson, 205½ (37)	KO 26	Jack Weld
July 4, 1919	Toledo, Ohio	Jack Dempsey, 187 (24)	Jess Willard, 245 (35)	KO 3	Ollie Peac
Sept. 23, 1926	Philadelphia	(c) Gene Tunney, 189½ (28)	Jack Dempsey, 190 (31)	10	Pop Reilly
June 12, 1930	New York	Max Schmeling, 188 (24)	Jack Sharkey, 197 (27)	WF 4	Jim Crowley
June 21, 1932	Long Island City	Jack Sharkey, 205 (29)	Max Schmeling, 188 (26)	15	Gunboat S
June 29, 1933	Long Island City	Primo Carnera, 260½ (26)	Jack Sharkey, 201 (30)	KO 6	Arthur Don
June 14, 1934	Long Island City	Max Baer, 209½ (25)	Primo Carnera, 263½ (27)	KO 11	Arthur Don
June 13, 1935	Long Island City	Jim Braddock, 193½ (29)	Max Baer, 209½ (26)	15	Jack McAv
June 22, 1937	Chicago	Joe Louis, 197½ (23)	Jim Braddock, 197 (31)	KO 8	Tommy Hen
June 22, 1949	Chicago	(d) Ezzard Charles, 181½ (27)	Joe Walcott, 195½ (35)	15	Davey Mil
Sept. 27, 1950	New York	(e) Ezzard Charles, 184½ (29)	Joe Louis, 218 (36)	15	Mark Conn
July 18, 1951	Pittsburgh	Joe Walcott, 194 (37)	Ezzard Charles, 182 (30)	KO 7	Buck McTie
Sept. 23, 1952	Philadelphia	(f) Rocky Marciano, 184 (28)	Joe Walcott, 196 (38)	KO 13	Charley Dag
Nov. 30, 1956	Chicago	Floyd Patterson, 182½ (21)	Archie Moore, 187½ (39)	KO 5	Frank Sikr
June 26, 1959	New York	Ingemar Johansson, 196 (26)	Floyd Patterson, 182 (24)	KO 3	Ruby Gold
June 20, 1960	New York	Floyd Patterson, 190 (25)	Ingemar Johansson, 194½ (27)	KO 5	Arthur Mer

(a) Jeffries retired as champion in March 1905. He named Marvin Hart and Jack Root as leading contenders; agreed to referee their fight in Reno, Nev., on July 3, 1905, with the stipulation that he would term the winner the champion. Hart, 190 (28), knocked out Root, 171 (29), in the 12th round. (b) Burns claimed the title by defeating Hart. (c) Tunney retired as champion after defeating Tom Heeney on July 26, 1928. (d) After Louis announced his retirement as champion on March 1, 1949, Charles won recognition from the National Boxing Association as champion by defeating Walcott. (e) Charles gained undisputed recognition as champion by defeating Louis, who came out of retirement. (f) Retired as champion April 27, 1956.

BARE KNUCKLE HEAVYWEIGHT CHAMPIONS, 1719-1892

- 1719—Jim Figg
 1734—George Taylor
 1740—Jack Broughton
 1750—Jack Slack
 1760—Bill Stevens
 1761—George Meggs
 1765—Bill Darts
 1777—Harry Sellers
 1780—Jack Harris
 1785—Tom (Jackling) Johnson
 1790—Big Ben Brain
 1792—Daniel Mendoza
 1795—John Jackson (retired)
 1802—Jem Belcher
 1805—Henry Pearce (Game Chicken)
 1808—John Gully (declined title)
 1809—Tom Cribb received belt, not transferable, and cup.
 1824—Tom Spring received four cups; resigned title.
 1825—Jem Ward received belt, not transferable.
 1838—James (Deaf) Burke claimed title.
 1839—William Thompson (Bendigo) beat Burke; claimed championship; received belt from Jem Ward.
 1841—Nick Ward (Jem's brother) beat Ben Caunt, Feb. 2. In return match Caunt beat Nick Ward and received belt by subscription. It was transferable.
 1845—Thompson beat Caunt and got belt.
 1850—Bill Perry (The Tipton Slasher), after fight with Paddock, claimed title.
 1851—Harry Broome won title from Perry.
 1853—Perry claimed title when Broome forfeited £200 to him in a match; retired from ring on Aug. 13.
 1857—Tom Sayers beat Perry for £200 a side and new belt.
 1860—Sayers retired after 42-round draw with John C. Heenan (The Benicia Boy), leaving old belt open for competition.
- 1860—Sam Hurst (The Stalybridge Infant) beat Paddock and received belt.
 1861—Jem Mace beat Hurst.
 1862—Mace beat Tom King for £200 a side and the belt.
 1862—King beat Mace and claimed belt. Subsequently it up. Declined to meet Mace again. Mace claimed.
 1863—King beat Heenan for £1,000 a side.
 1865—Joe Wormald beat Andrew Marsden for £200 a side and belt, which had been claimed by both. Belt given to Wormald, who forfeited £120 to Mace.
 1866—Mace and Joe Goss fought draw with £200 a side belt at stake.
 1867—Wormald received £200 forfeit from Ned O'Baldwin and claimed belt when O'Baldwin failed to appear at starting place.
 1867—Mace and O'Baldwin drew; £200 a side; title and in abeyance.
 1869—Mike McCoole defeated Tom Allen and claimed American championship.
 1870—Mace claimed world title by knocking out Allen 10 rounds.
 1873—Mace retired and Allen claimed title of world champion by defeating McCoole.
 1876—Allen fought Joe Goss, ranked next to Mace in England. Allen was disqualified in the 27th round, fouling and Goss was recognized as world champion under London Prize Ring Rules.
 1880—Paddy Ryan knocked out Goss in the 87th round, May 30, near Colliers Station, W. Va., and became the first American to hold the undisputed world bare knuckle championship.
 1882—John L. Sullivan knocked out Ryan in the 9th round at Mississippi City, Miss., on Feb. 7 and became last bare knuckle champion.
 1889—Sullivan defeated Jake Kilrain in the last bare knuckle championship fight. The bout, on July 8 at Richmond, Miss., went 75-rounds.

OTHER WORLD BOXING TITLEHOLDERS

HT HEAVYWEIGHT CHAMPIONS

Jack Root, George Gardner
 Bob Fitzsimmons
 Philadelphia Jack O'Brien (r)
 Jack Dillon
 Battling Levinsky
 Georges Carpentier
 Battling Siki
 Mike McTigue
 Paul Berlenbach
 Jack Delaney (a)
 Mike McTigue
 Tommy Loughran (a)
 Jimmy Slattery
 Maxie Rosenbloom
 Bob Olin
 John Henry Lewis (a)
 Melio Bettina
 Billy Conn (a)
 Anton Christoforidis (NBA)
 Gus Lesnevich
 Freddie Mills
 Joey Maxim
 Archie Moore

doned title. (r)Retired.

MIDDLEWEIGHT CHAMPIONS

Tom Chandler
 George Rooke
 Mike Donovan (r)
 Jack (Nonpareil) Dempsey
 Bob Fitzsimmons (a)
 Stanley Ketchel, Billy Papke
 Stanley Ketchel (d)
 Frank Klaus
 George Chip
 Al McCoy
 Mike O'Dowd
 Johnny Wilson
 Harry Greb
 Tiger Flowers
 Mickey Walker (a)

the National Boxing Association and the New York State Athletic Commission were divided on title holders throughout these years. The following were regarded as champions by one body or the other during this period: Gorilla Jones, Ben Jeby, Marcel Thil, Lou Brouillard, Vince Dundee, Teddy Yarosz, Babe Sko, Freddy Steele, Al Hostak, Solly Krieger, Ned Apostoli, Ceferino Garcia, Ken Overlin, Billy Rose, Tony Zale.

Tony Zale
 Rocky Graziano
 Tony Zale
 Marcel Cerdan
 Mike La Motta
 Ray Robinson, Randy Turpin
 Ray Robinson (r)
 Earl Olson
 Ray Robinson
 Gene Fullmer, Ray Robinson
 Carmen Basilio
 Ray Robinson (x)
 Gene Fullmer (NBA)
 Al Pender (y)

oned title. (d)Died. (r)Retired. (x)NBA recognition in 1959; recognized thereafter in New York and Massachusetts. (y)Recognized in New York and Massachusetts only.

WELTERWEIGHT CHAMPIONS

1892-94—Mysterious Billy Smith
 1894-96—Tommy Ryan
 1896 —Kid McCoy (a)
 1896-1900—Mysterious Billy Smith
 1900 —Rube Ferns
 1900-01—Matty Matthews
 1901 —Rube Ferns
 1901-04—Joe Walcott
 1904 —Dixie Kid (a)
 1904-06—Joe Walcott
 1906-07—Honey Melody
 1907 —Mike (Twin) Sullivan (a)
 1915-19—Ted Lewis
 1919-22—Jack Britton
 1922-26—Mickey Walker
 1926-27—Pete Latzo
 1927-29—Joe Dundee
 1929-30—Jackie Fields
 1930 —Young Jack Thompson
 1930-31—Tommy Freeman
 1931 —Young Jack Thompson
 1931-32—Lou Brouillard
 1932-33—Jackie Fields
 1933 —Young Corbett 3d
 1933-34—Jimmy McLarnin
 1934 —Barney Ross
 1934-35—Jimmy McLarnin
 1935-38—Barney Ross
 1938-40—Henry Armstrong
 1940-41—Fritzie Zivic
 1941-46—Freddie Cochrane
 1946 —Marty Servo (r)
 1946-51—Ray Robinson (a)
 1951 —Johnny Bratton (NBA)
 1951-54—Kid Gavilan
 1954-55—Johnny Saxton
 1955 —Tony DeMarco
 1955-56—Carmen Basilio
 1956 —Johnny Saxton
 1956-57—Carmen Basilio (a)
 1958 —Virgil Akins
 1958-60—Don Jordan
 1960 —Benny (Kid) Paret

(a)Abandoned title. (r)Retired.

Famous Firsts in Boxing

First to regain heavyweight championship: Floyd Patterson, by a knockout victory over Ingemar Johansson, at the Polo Grounds, New York, June 20, 1960.

First set of boxing rules and first set of boxing gloves: Made by Jack Broughton, 1743.

First glove fight: Between two English boxers, at Aix-la-Chapelle, France, October 8, 1818.

First million-dollar gate: Jack Dempsey vs. Georges Carpentier at Boyle's Thirty Acres, Jersey City, N. J., July 2, 1921 (\$1,789,236).

First round-by-round fight broadcast: Dempsey vs. Carpentier, 1921; J. Andrew White announcer.

First fight on television (publicly screened): Eric Boon vs. Arthur Danahar, Harringay Arena, London, England, February 23, 1939.

LIGHTWEIGHT CHAMPIONS

- 1885-96—Jack McAuliffe*
 1896-99—Kid Lavigne
 1899-02—Frank Erne
 1902-08—Joe Gans
 1908-10—Battling Nelson
 1910-12—Ad Wolgast
 1912-14—Willie Ritchie
 1914-17—Freddy Welsh
 1917-25—Benny Leonard (r)
 1925 —Jimmy Goodrich
 1925-26—Rocky Kansas
 1926-30—Sammy Mandell
 1930 —Al Singer
 1930-33—Tony Canzoneri
 1933-35—Barney Ross (a)
 1935-36—Tony Canzoneri
 1936-38—Lou Ambers
 1938-39—Henry Armstrong
 1939-40—Lou Ambers
 1940-41—Lew Jenkins
 1941-42—Sammy Angott (r)
 1943-47—The National Boxing Association and the New York State Athletic Commission recognized different champions in these years. Title holders, according to the N. Y. Commission, were Beau Jack and Bob Montgomery, and, according to the NBA, Sammy Angott, who made a comeback, Juan Zurita and Ike Williams. Williams defeated Montgomery in 1947 to provide a universal champion.
 1947-51—Ike Williams
 1951-52—James Carter
 1952 —Lauro Salas
 1952-54—James Carter
 1954 —Paddy DeMarco
 1954-55—James Carter
 1955-56—Wallace Smith
 1956 —Joe Brown

* McAuliffe was champion of America, but never held the world crown, his battle for the world title with Jem Carney of England in 1887 resulting in a 74-round draw.
 (a) Abandoned title. (r) Retired.

FEATHERWEIGHT CHAMPIONS

- 1889 —Dal Hawkins (a)
 1890 —Billy Murphy
 1892-1900—George Dixon
 1900-01—Terry McGovern
 1901 —Young Corbett (a)
 1901-12—Abe Attell
 1912-23—Johnny Kilbane
 1923 —Eugene Criqui
 1923-25—Johnny Dundee (a)
 1925-27—Louis (Kid) Kaplan (a)
 1927-28—Benny Bass
 1928 —Tony Canzoneri
 1928-29—Andre Routis
 1929-32—Battling Battalino (a)
 1932 —Tommy Paul (NBA); Kid Chocolate (N. Y. Comm.).
 1933-36—Freddie Miller
 1936-37—Petey Sarron
 1937-38—Henry Armstrong (a)
 1938-40—Joey Archibald
 1940-41—Harry Jeffra, Joey Archibald
 1941-42—Chalky Wright
 1942-48—Willie Pep
 1948-49—Sandy Saddler
 1949-50—Willie Pep
 1950-57—Sandy Saddler (r)
 1957-59—Kid Bassey
 1959 —Davey Moore

(a) Abandoned title. (r) Retired.

BANTAMWEIGHT CHAMPIONS

- 1890-92—George Dixon (a)
 1894-99—Jimmy Barry (r)
 1899-1900—Terry McGovern (a)
 1901 —Harry Harris (a)
 1902-03—Harry Forbes
 1903-04—Frankie Neil
 1904 —Joe Bowker (a)
 1905-07—Jimmy Walsh (a)
 1910-14—Johnny Coulon
 1914-17—Kid Williams
 1917-20—Pete Herman
 1920-21—Joe Lynch
 1921 —Pete Herman
 1921-22—Johnny Buff
 1922-24—Joe Lynch
 1924 —Abe Goldstein
 1924-25—Eddie (Cannonball) Martin
 1925 —Charlie (Phil) Rosenberg (d)
 1927-28—Bud Taylor (NBA) (a)
 1929-35—Al Brown
 1935-36—Baltazar Sangchili
 1936 —Tony Marino
 1936-37—Sixto Escobar
 1937-38—Harry Jeffra
 1938-40—Sixto Escobar (r)
 1940-42—Lou Salica
 1942-47—Manuel Ortiz
 1947 —Harold Dade
 1947-50—Manuel Ortiz
 1950-52—Vic Towel
 1952-54—Jimmy Carruthers (r)
 1954-56—Robert Cohen
 1956-57—Mario D'Agata
 1956 —Raul Macias (NBA)
 1957-59—Alphonse Halimi
 1959 —Jose Becerra

(a) Abandoned title. (d) Deprived of title when unable to make weight for championship bout. (r) Retired.

FLYWEIGHT CHAMPIONS

- 1916-23—Jimmy Wilde
 1923-25—Pancho Villa (d)
 1925 —Frankie Genaro
 1925-27—Fidel La Barba (r)
 1927-31—The NBA and the New York Commission recognized different champions in these years. Claimed at various times were Corporal Izzy Schorsch, Frankie Genaro, Emile Spider Pladner, N. Y. Wolgast and Young Perez.
 1932-35—Jackie Brown
 1935-38—Benny Lynch (a)
 1939 —Peter Kane (a)
 1943-47—Jackie Paterson (d)
 1947-50—Rinty Monaghan (r)
 1950 —Terry Allen
 1950-52—Dado Marino
 1952-54—Yoshio Shirai
 1954-60—Pascual Perez
 1960 —Pone Kingpetch

(a) Abandoned title. (d) Died. (r) Retired.

PROFESSIONAL WEIGHT LIMITS

Flyweight	.....
Bantamweight	.....
Featherweight	.....
Lightweight	.....
Welterweight	.....
Middleweight	.....
Light heavyweight	.....
Heavyweight	..... over

ICE (FIGURE) SKATING

World Champions

MEN			
Gilbert Fuchs, Germany	1925-28 Willi Boeckl, Austria	1915-21	No competition
Gustav Hugel, Austria	1929 Gillis Grafstrom, Sweden	1922-26	Mrs. Szabo Plank, Austria
H. Grenander, Sweden	1930-36 Karl Schafer, Austria	1927-36	Sonja Henie, Norway
O Gustav Hugel, Austria	1937-38 Felix Kaspar, Austria	1937	Cecilia Colledge, England
Ulrich Salchow, Sweden	1939 Graham Sharp, England	1938-39	Megan Taylor, England
Gilbert Fuchs, Germany	1940-46 No competition	1940-46	No competition
Ulrich Salchow, Sweden	1947 Hans Gerschweller, Switzerland	1947-48	Barbara Ann Scott, Canada
Fritz Kachler, Austria	1948-52 Richard Button, United States	1949-50	Aja Vrzanova, Czechoslovakia
Gosta Sandahl, Sweden	1953-56 Hayes Jenkins, United States	1951	Jeannette Altwegg, England
No competition	1957-59 David Jenkins, United States	1952	Jacqueline du Bief, France
Gillis Grafstrom, Sweden		1953	Tenley Albright, United States
Fritz Kachler, Austria		1954	Gundi Busch, Germany
Gillis Grafstrom, Sweden		1955	Tenley Albright, United States
		1956-59	Carol Heiss, United States

WOMEN

1906-07 Madge Syers, England
1908-11 Lily Kronberger, Hungary
1912-14 Meray Horvath, Hungary

United States Champions

MEN			
Norman Scott	1942 Bobby Specht	1921-24	Mrs. Theresa Weld Blanchard
No competition	1943 Arthur Vaughn, Jr.	1925-27	Beatrice Loughran
Nathaniel Niles	1944-45 No competition	1928-33	Maribel Vinson
No competition	1946-52 Richard Button	1934	Suzanne Davis
Sherwin Badger	1953-56 Hayes Jenkins	1935-37	Maribel Vinson
Nathaniel Niles	1957-59 David Jenkins	1938-40	Joan Tozzer
C. I. Christenson		1941	Jane Vaughn
Nathaniel Niles		1942	Mrs. Jane Vaughn Sullivan
Roger Turner		1943-48	Gretchen Merrill
Robin Lee		1949-50	Yvonne Sherman
Eugene Turner		1951	Sonya Klopfer
		1952-56	Tenley Albright
		1957-59	Carol Heiss

WOMEN

1914 Theresa Weld
1915-17 No competition
1918 Mrs. R. S. Beresford
1919 No competition
1920 Theresa Weld

Joe Louis' Title Fights

1937* Jim Braddock, Chicago.....	KO 8	Feb. 17, 1941	Gus Dorazio, Philadelphia.....	KO 2
1937 Tommy Farr, Yankee Stad.....	W 15	Mar. 21, 1941	Abe Simon, Detroit.....	KO 13
1938 Nathan Mann, Mad. Sq. Garden....	KO 3	Apr. 8, 1941	Tony Musto, St. Louis.....	KO 9
1938 Harry Thomas, Chicago.....	KO 5	May 23, 1941	Buddy Baer, Washington, D. C....	W disq. 7
1938 Max Schmeling, Yankee Stad.....	KO 1	June 18, 1941	Billy Conn, Polo Grounds.....	KO 13
1939 John Henry Lewis, Mad. Sq. Garden	KO 1	Sept. 29, 1941	Lou Nova, Polo Grounds.....	KO 6
1939 Jack Roper, Los Angeles.....	KO 1	Jan. 9, 1942	Buddy Baer, Mad. Sq. Garden.....	KO 1
1939 Tony Galento, Yankee Stad.....	KO 4	Mar. 27, 1942	Abe Simon, Mad. Sq. Garden.....	KO 6
1939 Bob Pastor, Detroit.....	KO 11	June 19, 1946	Billy Conn, Yankee Stad.....	KO 8
1940 Arturo Godoy, Mad. Sq. Garden....	W 15	Sept. 18, 1946	Tami Mauriello, Yankee Stad.....	KO 1
1940 Johnny Paycheck, Mad. Sq. Garden..	KO 2	Dec. 5, 1947	Joe Walcott, Mad. Sq. Garden.....	W 15
1940 Arturo Godoy, Yankee Stad.....	KO 8	June 25, 1948	Joe Walcott, Yankee Stad.....	KO 11
1940 Al McCoy, Boston.....	KO 6	Sept. 27, 1950†	Ezzard Charles, Yankee Stad.....	L 15
1941 Red Burman, Mad. Sq. Garden.....	KO 5	† After announcing retirement as champion on Mar. 1, 1949, Louis returned to boxing and sought title in bout with Charles.		

Marciano Was Unbeaten as a Pro

y Marciano, heavyweight boxing
 on of the world and winner of each
 49 fights as a professional, and
 his retirement from the ring on
 , 1956. He is the only heavyweight
 n ever to retire without losing
 ssional fight or even boxing to a

ano won the title on Sept. 23, 1952,
 adelphia, by knocking out Joe
 in the 13th round. He defended
 n six times. His gross purses for
 professional bouts have been esti-
 t \$2,000,000.

Marciano was born in Brockton, Mass.,
 on Sept. 1, 1924.

Of his 49 victories, the retired champion
 scored 43 by knockouts, more than half
 of them within three rounds.

These were Marciano's championship
 fights:

Sept. 23, 1952*	Joe Walcott, Philadelphia.....	KO 13
May 15, 1953	Joe Walcott, Chicago.....	KO 1
Sept. 24, 1953	Roland LaStarza, Polo Grounds.....	KO 11
June 17, 1954	Ezzard Charles, Yankee Stad.....	W 15
Sept. 17, 1954	Ezzard Charles, Yankee Stad.....	KO 8
May 16, 1955	Don Cockell, San Francisco.....	KO 9
Sept. 21, 1955	Archie Moore, Yankee Stad.....	KO 9

* Won title.

ICE (SPEED) SKATING

WORLD RECORDS

Source: International Skating Union (I.S.U.).

Event	Record	Recordholder and country	Where made	Date
500 meters....	0:40.2.....	Eugeniy Grishin, U.S.S.R.....	Lake Misurina, Italy.....	Jan. 22
	0:40.2.....	Eugeniy Grishin, U.S.S.R.....	Lake Misurina, Italy.....	Jan. 28
1,000 meters....	1:22.8.....	Eugeniy Grishin, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 12
1,500 meters....	2:06.3.....	Juhani Jarvinen, Finland.....	Squaw Valley, Calif.....	Mar. 2
3,000 meters....	4:40.2.....	Anton Huiskes, Holland.....	Davos, Switzerland.....	Jan. 2
5,000 meters....	7:45.6.....	Boris Shilkov, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 10
10,000 meters....	16:32.6.....	Hjalmar Andersen, Norway.....	Hamar, Norway.....	Feb. 10
All-around.....	184.638 pts.....	Dimitry Sakunenko, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 9-10

WOMEN

500 meters....	0:45.6.....	Tamara Rylova, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 11
1,000 meters....	1:33.4.....	Tamara Rylova, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 12
1,500 meters....	2:25.5.....	Khalida Schegolewa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 30
3,000 meters....	5:13.8.....	Rimma Zhukowa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 23
5,000 meters....	9:01.6.....	Rimma Zhukowa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 24
All-around.....	196.416 pts.....	Tamara Rylova, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 20-21

NATIONAL AMATEUR OUTDOOR RECORDS

Source: Amateur Skating Union of the United States.

Event	Record	Recordholder	Where made	Date
220 yards.....	0:18.1.....	Robert Fitzgerald.....	Minneapolis.....	Jan. 10
		Charles Gorman.....	Lake Placid, N. Y.....	Feb. 14
440 yards.....	0:35.4.....	Ken Bartholomew.....	St. Paul, Minn.....	Jan. 25
		Robert Fitzgerald.....	Minneapolis.....	Feb. 15
880 yards.....	1:14.2.....	Robert Fitzgerald.....	Minneapolis.....	Jan. 7
$\frac{3}{4}$ -mile.....	1:55.8.....	Clas Thunberg.....	Saranac Lake, N. Y.....	Feb. 15
Mile.....	2:38.2.....	Clas Thunberg.....	Lake Placid, N. Y.....	Feb. 12
	2:29.7*	Del Lamb.....	Oslo, Norway.....	Feb. 19
2 miles.....	5:33.8.....	Eddie Schroeder.....	Minneapolis.....	Jan. 30
5 miles.....	14:30.4.....	Ross Robinson.....	Lake Placid, N. Y.....	Feb. 12

* Made on 400-meter track.

WOMEN

220 yards.....	0:20.2.....	Maddy Horn.....	Saranac Lake, N. Y.....	Feb. 11
		Pat Gibson.....	St. Paul, Minn.....	Jan. 30
440 yards.....	0:39.4.....	Loretta Neitzel.....	Minneapolis.....	Feb. 3
880 yards.....	1:24.8.....	Jeanne Omelenchuk.....	St. Paul, Minn.....	Feb. 1
$\frac{3}{4}$ -mile.....	2:17.0.....	Dorothy Franey.....	Minneapolis.....	Jan. 16
Mile.....	3:04.5.....	Jeanne Omelenchuk.....	St. Paul, Minn.....	Feb. 1

CASTING

National Records

DISTANCE EVENTS

	Feet	$\frac{3}{8}$ -oz. bait—Charles Sutphin and William True	
Trout fly (average)—Jack Crossfield.....	186 $\frac{1}{2}$	$\frac{3}{8}$ -oz. bait—J. A. Halblieb, Frank Halper and Don Allen.....	100
Trout fly (long cast)—Jon Tarantino.....	201		100
Salmon fly (average)—Jon Tarantino.....	212		
Salmon fly (long cast)—Jon Tarantino.....	227		
$\frac{3}{8}$ -oz. bait (average)—Richard R. Ward.....	368		
$\frac{3}{8}$ -oz. bait (long cast)—Richard R. Ward.....	386		
$\frac{3}{8}$ -oz. bait (average)—Charles L. Schall.....	443		
$\frac{3}{8}$ -oz. bait (long cast)—Jon Tarantino.....	453		

ACCURACY EVENTS

Dry fly—Held by 9 casters.....	100 pts.		
Wet fly—Held by 67 casters.....	100 pts.		

COMBINED EVENTS

All accuracy—Casper Rigamer.....	396
Accuracy baits—Casper Rigamer.....	198
Accuracy flies—Don Meyer, Fred Mathis and Charles Sutphin.....	200
All-distance—Jon Tarantino.....	349
Distance baits—William J. Lovely.....	236
Distance flies—Jon Tarantino.....	114

LACROSSE

North-South Game Record

1940—North 6, South 5	1947—North 15, South 3	1952—South 15, North 7	1956—South 20, North 1
1941—South 7, North 6	1948—North 11, South 6	1953—South 12, North 9	1957—North 14, South 1
1942—North 6, South 3	1949—South 11, North 6 $\frac{1}{2}$	1954—North 13, South 11	1958—South 26, North 6
1943—South 9, North 5	1950—North 12, South 8	1955—South 12, North 11	1959—South 10, North 9
1946—North 14, South 14	1951—North 12, South 11		

ICE HOCKEY

HOCKEY, by birth and upbringing a Canadian game, is an offshoot of field hockey. Some historians state that the first hockey game was played in Montreal in December, 1879, between two teams composed almost exclusively of McGill University students, but others assert that Kingston, Ont., or Halifax, N. S., were the scene of earlier hockey games. In the real game of 1879 there were fifteen players on a side and they used an assortment of crude sticks to keep the puck in play. Early rules allowed nine men on the ice but the number was reduced to seven in 1886 and finally reduced to six, the standard of today.

The first governing body of the sport was the Amateur Hockey Association of Canada, organized in 1887. In the winter of 1894-95 a group of college students from the United States visited Canada, saw the game played, became enthused over the sport and introduced it as a winter sport when they returned home. This was the

start of hockey in the United States. The first professional league was the International Hockey League that operated, strangely enough, not in Canada but in northern Michigan in 1904-06 and included as players such famous stars as Cyclone Taylor and Hod Stuart, later included in the Hockey Hall of Fame.

Until 1910, professionals and amateurs were allowed to play together on "mixed teams," but this arrangement ended with the formation of the first "big league," the National Hockey Association, in eastern Canada in 1910. The Pacific Coast League, to provide professional hockey in the West, was organized in 1911 with Seattle (and later other American cities) included in the circuit. The National Hockey League replaced the National Hockey Association in 1917. Boston, in 1924, was the first American city to join that circuit. The Stanley Cup, top trophy of hockey, was competed for by "mixed teams" from 1894 to 1910, thereafter by professionals.

Professional Statistics STANLEY CUP WINNERS

Emblematic of world professional championship.

Montreal A. A.	1910—Montreal Wanderers	1927—Ottawa Senators	1944—Montreal Canadiens
Montreal Victorias	1911—Ottawa Senators	1928—N. Y. Rangers	1945—Toronto Maple Leafs
Manitoba Victorias	1912—Quebec Bulldogs	1929—Boston Bruins	1946—Montreal Canadiens
Montreal Victorias	1913—Quebec Bulldogs	1930—Montreal Canadiens	1947—Toronto Maple Leafs
Montreal Victorias	1914—Toronto	1931—Montreal Canadiens	1948—Toronto Maple Leafs
Montreal Shamrocks	1915—Vancouver Millionaires	1932—Toronto Maple Leafs	1949—Toronto Maple Leafs
Manitoba Victorias	1916—Montreal Canadiens	1933—N. Y. Rangers	1950—Detroit Red Wings
Montreal A. A.	1917—Seattle Metropolitans	1934—Chicago Black Hawks	1951—Toronto Maple Leafs
Ottawa Silver Seven	1918—Toronto Arenas	1935—Montreal Maroons	1952—Detroit Red Wings
Ottawa Silver Seven	1919—Series unfinished†	1936—Detroit Red Wings	1953—Montreal Canadiens
Ottawa Silver Seven	1920—Ottawa Senators	1937—Detroit Red Wings	1954—Detroit Red Wings
Montreal Wanderers	1921—Ottawa Senators	1938—Chicago Black Hawks	1955—Detroit Red Wings
Montreal Thistles	1922—Toronto St. Patricks	1939—Boston Bruins	1956—Montreal Canadiens
Montreal Wanderers*	1923—Ottawa Senators	1940—N. Y. Rangers	1957—Montreal Canadiens
Ottawa Senators	1924—Montreal Canadiens	1941—Boston Bruins	1958—Montreal Canadiens
	1925—Victoria Cougars	1942—Toronto Maple Leafs	1959—Montreal Canadiens
	1926—Montreal Maroons	1943—Detroit Red Wings	

Montreal Canadiens and Seattle, P.C.H.L. champions, had played five games at Seattle, Wash., when an epidemic (which took the life of Joe Hall of the Canadiens) caused the Department of Health to stop the game. The team won two games, with one contest ending in a tie.

MOST VALUABLE PLAYER

The Hart Trophy

Awarded annually to the player voted most valuable to his team in the regular N. H. L. season.

Frank Nighbor, Ottawa	1942	Tom Anderson, New York Americans
Jimmy Burch, Hamilton	1943	Bill Cowley, Boston
Clarence Stewart, Montreal Maroons	1944	Babe Pratt, Toronto
Herb Gardiner, Montreal Canadiens	1945	Elmer Lach, Montreal Canadiens
Howie Morenz, Montreal Canadiens	1946	Max Bentley, Chicago
Doc Warters, New York Americans	1947	Maurice Richard, Montreal Canadiens
Clarence Stewart, Montreal Maroons	1948	Buddy O'Connor, New York Rangers
Howie Morenz, Montreal Canadiens	1949	Sid Abel, Detroit
Red Shore, Boston	1950	Chuck Rayner, New York Rangers
Paul Joliat, Montreal Canadiens	1951	Milt Schmidt, Boston
Red Shore, Boston	1952-53	Gordon Howe, Detroit
Al Siebert, Montreal Canadiens	1954	Al Rollins, Chicago
Red Shore, Boston	1955	Ted Kennedy, Toronto
Howie Blake, Montreal Canadiens	1956	Jean Beliveau, Montreal Canadiens
Bill Goodfellow, Detroit	1957-58	Gordon Howe, Detroit
Bill Cowley, Boston	1959	Andy Bathgate, New York Rangers

FENCING

Source: Amateur Fencers League of America.

National Champions

FOIL

1892	W. Scott-O'Connor
1893	William Heintz
1894	Charles Bothner
1895	Albertson Van Zo Post
1896	G. Kavanaugh
1897	Charles Bothner
1898	No competition
1899	G. Kavanaugh
1900	F. Townsend
1901	Charles Tatham
1902	J. P. Parker
1903	F. Townsend
1904-05	Charles Bothner
1906	S. D. Breckinridge
1907	C. Waldbott
1908	W. L. Bowman
1909	O. A. Dickinson
1910	G. K. Bainbridge
1911	George Breed
1912	Sherman Hall
1913	P. J. Meylan
1914	S. D. Breckinridge
1915	O. A. Dickinson
1916	A. E. Sauer
1917	Sherman Hall
1918	No competition
1919-20	Sherman Hall
1921	F. W. Honeycutt
1922	H. M. Raynor
1923	R. Peroy
1924	Leo Nunes
1925-28	George Calnan
1929	Joseph Levis
1930-31	George Calnan
1932-33	Joseph Levis
1934	Hugh Alessandrone
1935	Joseph Levis
1936	Hugh Alessandrone
1937	Joseph Levis
1938	Dernell Every
1939	Norman Lewis
1940	Dernell Every
1941	Dean Cetrulo
1942-43	Warren Dow
1944	Alfred Snyder
1945	Dernell Every
1946	Jose de Capriles
1947	Dean Cetrulo
1948	Nathaniel Lubell
1949	Daniel Bukantz
1950-51	Silvio Giolito
1952-53	Daniel Bukantz
1954	Joseph Levis
1955	Albert Axelrod
1956	Sewall Shurtz
1957	Daniel Bukantz
1958	Albert Axelrod
1959	Joseph Paletta

EPEE

1892	Barnard O'Connor
1893	Graeme Hammond
1894	R. O. Haubold
1895	Charles Bothner
1896	Albertson Van Zo Post
1897	Charles Bothner
1898	No competition
1899	M. Diaz

1900	W. D. Lyon
1901-03	Charles Tatham
1904	Charles Bothner
1905	W. Scott-O'Connor
1906	W. Grebe
1907	W. D. Lyon
1908	Paul Benzenberg
1909-10	A. de la Poer
1911	George Breed
1912	Albertson Van Zo Post
1913	A. E. Sauer
1914	F. W. Allen
1915	J. A. MacLaughlin
1916	William Russell
1917	Leo Nunes
1918	No competition
1919	William Russell
1920	R. W. Dutcher
1921	C. R. McPherson
1922	Leo Nunes
1923	George Calnan
1924	Leo Nunes
1925	William Russell
1926	Leo Nunes
1927	Harold Van Buskirk
1928	Leo Nunes
1929	F. S. Righeimer
1930	M. Pasche
1931	Miguel de Capriles
1932	Leo Nunes
1933-34	Gustave Heiss
1935	Thomas Sands
1936	Gustave Heiss
1937	Thomas Sands
1938	Jose de Capriles
1939	Loyal Tingley
1940	Fred Seibert
1941	Gustave Heiss
1942	Henrique Santos
1943	Robert Driscoll
1944	Miguel de Capriles
1945	Max Gilman
1946	Charles Wolfe
1947	James Strauch
1948-50	Norman Lewis
1951	Jose de Capriles
1952	Abelardo Menendez
1953	Donald Thompson
1954	Sewall Shurtz
1955-56	Abram Cohen
1957-58	Richard Berry
1959	Henry Kolowrat

SABER

1892	R. O. Haubold
1893-94	Graeme Hammond
1895-97	Charles Bothner
1898	No competition
1899	G. Kavanaugh
1900	J. L. Ervin
1901-03	Albertson Van Zo Post
1904	A. G. Anderson
1905	K. B. Johnson
1906-07	A. G. Anderson
1908	G. W. Postgate
1909	A. E. Sauer
1910	J. T. Shae
1911	A. G. Anderson
1912	C. A. Bill

1913	A. G. Anderson
1914	W. Von Blejenburgh
1915-16	Sherman Hall
1917	Arthur Lyon
1918	No competition
1919	Arthur Lyon
1920	Sherman Hall
1921	C. R. McPherson
1922	Leo Nunes
1923	L. M. Schoonmaker
1924	J. F. Gignoux
1925	Joseph Vince
1926	Leo Nunes
1927-28	Nickolas Muray
1929	Leo Nunes
1930	Norman Armitage
1931-33	John Huffman
1934-36	Norman Armitage
1937-38	John Huffman
1939-43	Norman Armitage
1944	Tibor Nyilas
1945	Norman Armitage
1946	Tibor Nyilas
1947	James Flynn
1948	Dean Cetrulo
1949	Umberto Martino
1950-53	Tibor Nyilas
1954	George Worth
1955	Richard Dyer
1956	Tibor Nyilas
1957-58	Daniel Magay
1959	Tomas Orley

WOMEN'S FOIL

1912	A. Baylis
1913	Mrs. W. H. Dewar
1914	M. Stimson
1915	Jessie Pyle
1916	Mrs. C. H. Voorhees
1917	Florence Walton
1918-19	No competition
1920-23	Adeline Gehrig
1924	Mrs. C. H. Hopper
1925-26	Mrs. Florence Schoonmaker
1927	S. Stern
1928	Marion Lloyd
1929	Mrs. Florence Schoonmaker
1930	Mrs. Harold Van Buskirk
1931	Marion Lloyd
1932-33	Dorothy Locke
1934-35	Helene Mayer
1936	Mrs. Joanne de Tuscan
1937-39	Helene Mayer
1940	Helena Mroczkowska
1941-42	Helene Mayer
1943	Helena Mroczkowska
1944	Madaline Dalton
1945	Maria Cerra
1946	Helene Mayer
1947-48	Mrs. Helena Mroczkowska
1949	Polly Craus
1950-51	Janice Lee York
1952	Mrs. Maxine Mitchell
1953	Paula Sweeney
1954-55	Mrs. Maxine Mitchell
1956-57	Mrs. Janice Lee Romary
1958	Mrs. Maxine Mitchell
1959	Maria del Pilar Roldan

ATHLETES OF THE YEAR

The Associated Press annually polls outstanding sportswriters and broadcasters throughout the nation to select the outstanding male and female athletes of the year.

MALE

Athlete	Sport
Pepper Martin	Baseball
ene Sarazen	Golf
arl Hubbell	Baseball
izzy Dean	Baseball
de Louis	Boxing
esse Owens	Track and field
on Budge	Tennis
on Budge	Tennis
ile Kinnick	Football
ommy Harmon	Football
de DiMaggio	Baseball
rank Sinkwich	Football
under Hagg	Track and field
yron Nelson	Golf
yron Nelson	Golf
enn Davis	Football
hunny Lujack	Football
ou Boudreau	Baseball
on Hart	Football
m Konstanty	Baseball
ck Kazmaier	Football
bb Mathias	Track and field
en Hogan	Golf
illie Mays	Baseball
ward (Hopalong) Cassidy	Football
ickey Mantle	Baseball
d Williams	Baseball
rb Elliott	Track and field
emar Johansson	Boxing

FEMALE

Year	Athlete	Sport
1931	Helene Madison	Swimming
1932	Mildred (Babe) Didrikson	Track and field
1933	Helen Jacobs	Tennis
1934	Virginia Van Wie	Golf
1935	Helen Wills Moody	Tennis
1936	Helen Stephens	Track and field
1937	Katherine Rawls	Swimming
1938	Patty Berg	Golf
1939	Alice Marble	Tennis
1940	Alice Marble	Tennis
1941	Betty Hicks Newell	Golf
1942	Gloria Callen	Swimming
1943	Patty Berg	Golf
1944	Ann Curtis	Swimming
1945	Mildred (Babe) Didrikson Zaharias	Golf
1946	Mildred (Babe) Didrikson Zaharias	Golf
1947	Mildred (Babe) Didrikson Zaharias	Golf
1948	Fanny Blankers-Koen	Track and field
1949	Marlene Bauer	Golf
1950	Mildred (Babe) Didrikson Zaharias	Golf
1951	Maureen Connolly	Tennis
1952	Maureen Connolly	Tennis
1953	Maureen Connolly	Tennis
1954	Mildred (Babe) Didrikson Zaharias	Golf
1955	Patty Berg	Golf
1956	Patricia McCormick	Diving
1957	Althea Gibson	Tennis
1958	Althea Gibson	Tennis
1959	Maria Bueno	Tennis

SULLIVAN AWARD WINNERS

James E. Sullivan Memorial Award annually to the amateur athlete by sports leaders as having done the most to advance sportsmanship.

Athlete	Sport
bert T. Jones, Jr.	Golf
ernard E. Berlinger	Track and field
nes A. Bausch	Track and field
nn Cunningham	Track and field
liam R. Bonthron	Track and field
Lawson Little, Jr.	Golf
nn Morris	Track and field
Donald Budge	Tennis
ald R. Lash	Track and field
eph W. Burk	Rowing
regory Rice	Track and field
lie MacMitchell	Track and field
melius Warmerdam	Track and field
ert L. Dodds	Track and field
rt Curtis	Swimming
x (Doc) Blanchard	Football
Arnold Tucker	Football
n B. Kelly, Jr.	Rowing
ert B. Mathias	Track and field
ard T. Button	Figure skating
d Wilt	Track and field
ert E. Richards	Track and field
ace Ashenfelter	Track and field
or Sammy Lee	Diving
vin Whitfield	Track and field
rison Dillard	Track and field
icia McCormick	Diving
by Morrow	Track and field
nn Davis	Track and field
y O'Brien	Track and field

HICKOK AWARD WINNERS

The richest award in sports is the \$10,000 S. Rae Hickok Belt, which annually goes to the professional athlete of the year, as selected in a poll of sportswriters and sportscasters throughout the country.

1950	Phil Rizzuto	Baseball
1951	Allie Reynolds	Baseball
1952	Rocky Marciano	Boxing
1953	Ben Hogan	Golf
1954	Willie Mays	Baseball
1955	Otto Graham	Football
1956	Mickey Mantle	Baseball
1957	Carmen Basilio	Boxing
1958	Bob Turley	Baseball
1959	Ingemar Johansson	Boxing

TOP ATHLETES OF A HALF-CENTURY

In 1950 The Associated Press polled the nation's sports experts on the "greats" in various fields during the past half-century. The list of winners:

Male athlete—Jim Thorpe.
 Female athlete—Mildred D. Zaharias.
 Baseball player—Babe Ruth.
 Football player—Jim Thorpe.
 Fighter—Jack Dempsey.
 Basketball player—George Mikan.
 Track performer—Jesse Owens.
 Golfer—Bobby Jones.
 Tennis player—Bill Tilden.
 Swimmer—Johnny Weissmuller.
 Race horse—Man o' War.

AUTO RACING

THE FIRST automobiles on the road were erratic in action and driving them or even riding in them was considered a trifle risky, hence it became the sporting thing to do. Experimental excursions in crude cars gave rise to rivalry in speed over the rough roads of the Gay Nineties and this eventually led to formal contests, the first of which was a road race from Paris to Rouen in 1894, with 26 cars showing up at the starting line. Formal competition in the United States started with a road race in the Chicago district on Thanksgiving Day, 1895, and the winner, J. F. Duryea, covered the road distance of 54.36 miles at the astonishing average of 7.5 miles per hour!

Around 1900 Paris became the hub of road racing in Europe and each year there were raucous, dusty and dangerous races from Paris to Berlin, to Vienna, to Madrid

and other cities on the Continent. Accidents were so numerous to drivers and spectators that, after a gory group of mishaps in the forepart of the Paris-Madrid race of 1903, the contest was halted by public authorities and road racing was brought under control. Other kinds of auto racing were expected to view. Some contests, including 24-hour races for stock models, were held on circular or oval tracks originally built for horse racing. Finally came the special racing strips for autos, including such famous autodromes as Brooklands in England and the Indianapolis Speedway in the United States.

As a test of engine and chassis under severe conditions and great strain, auto racing rendered invaluable assistance to the development of the motor car of today.

National Champions

(A. A. A. champions, 1909-1955; U. S. Auto Club champions, since 1956.)

1909 Bert Dingley	1924 Jimmy Murphy	1939 Wilbur Shaw
1910 Ray Harroun	1925 Peter DePaolo	1940 Rex Mays
1911 Ralph Mulford	1926 Harry Hartz	1941 Rex Mays
1912 Ralph DePalma	1927 Peter DePaolo	1946 Ted Horn
1913 Earl Cooper	1928 Louis Meyer	1947 Ted Horn
1914 Ralph DePalma	1929 Louis Meyer	1948 Ted Horn
1915 Earl Cooper	1930 Billy Arnold	1949 John Parsons
1916 Dario Resta	1931 Louis Schneider	1950 Henry Banks
1917 Earl Cooper	1932 Bob Carey	1951 Tony Bettenhausen
1918 Ralph Mulford	1933 Louis Meyer	1952 Charles Stevens
1919 Howard Wilcox	1934 Bill Cummings	1953 Sam Hanks
1920 Gaston Chevrolet	1935 Kelly Petillo	1954 Jimmy Bryan
1921 Tommy Milton	1936 Mauri Rose	1955 Bob Sweikert
1922 Jimmy Murphy	1937 Wilbur Shaw	1956 Jimmy Bryan
1923 Eddie Hearne	1938 Floyd Roberts	1957 Jimmy Bryan
		1958 Tony Bettenhausen
		1959 Rodger Ward

History of the One-Mile Speed Mark

The first recorded effort for one mile was made in 1898 by Chasseloup-Laubat, driving a Jentaud, in France. His average was 39.23 m.p.h. This was increased to 65.79 in 1899 by Jenatzky, also in France. The first man to travel better than 100 m.p.h. was Rigolly, in 1904, at 103.56 m.p.h., followed by Baras, with 104.53 in the same year. The first over 200 m.p.h. was Major H. O. D. Segrave, who drove at 203.79 in 1927 at Daytona, Florida.

In 1947 John Cobb of London became the first person to travel more than 400 m.p.h. on land. The Englishman accomplished the

feat on Sept. 16 at Bonneville, Utah, with a record raising the world mile record to 394.1 m.p.h. and the world kilometer (.621371 mile) mark to 393.825 m.p.h.

Cobb's fastest mile was covered in 8.13 seconds and his average speed was 9.13 seconds. The Briton drove at the rate of 385.645 m.p.h. for the mile and 388.019 for the kilometer on the southward run, then increased his pace to 403.135 m.p.h. and 399.808, respectively, on the northward sprint, the best times ever recorded.

Those who drove 300 m.p.h. or better follow (all at Bonneville):

Date	Driver	Car	Average
Sept. 3, 1935	Sir Malcolm Campbell	Bluebird Special	301.1
Nov. 19, 1937	Capt. G. E. T. Eyston	Thunderbolt #1	311.4
Aug. 27, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	345.5
Sept. 15, 1938	John Cobb	Railton	350.2
Sept. 16, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	357.5
Aug. 23, 1939	John Cobb	Railton Red Lion	368.9
Sept. 16, 1947	John Cobb	Railton Mobil Special	394.1

Indianapolis Motor Speedway Winners

(500-mile race)

Winner	Car	Second	Time	m.p.h.
Ray Harroun	Marmon	Mulford	6:42:08	74.59
Joe Dawson	National	Tetzloff	6:21:08	78.70
Jules Goux	Peugeot	Wishart	6:35:05	76.92
Rene Thomas	Delage	Duray	6:03:45	82.47
Ralph DePalma	Mercedes	Resta	5:33:55	89.84
Davis Resta	Peugeot	De Aleve	3:34:17	83.26
No races				
Howard Wilcox	Peugeot	Hearne	5:40:42	88.06
Gaston Chevrolet	Monroe	Thomas	5:38:32	88.50
Tommy Milton	Frontenac	Sarles	5:34:44	89.62
Jimmy Murphy	Murphy Special	Hartz	5:17:30	94.48
Tommy Milton	H. G. S. Special	Hartz	5:29:50	90.95
L. Corum-J. Boyer	Dusenber Special	Cooper	5:05:23	98.23
Peter DePaolo	Dusenber Special	Lewis	4:56:39	101.13
Frank Lockhart	Miller Special	Hartz	4:10:17	95.88
George Souders	Dusenber	Devore	5:07:33	97.54
Louis Meyer	Miller Special	Moore	5:01:33	99.48
Ray Keech	Simplex Special	Meyer	5:07:25	97.58
Billy Arnold	Hartz-Miller	Cantlon	4:58:39	100.488
Louis Schneider	Bowes Special	Frame	5:10:28	96.629
Fred Frame	Miller Special	Wilcox	4:48:03.79	104.144
Louis Meyer	Miller Special	Shaw	4:48:12.75	104.089
Bill Cummings	Miller Special	Rose	4:46:05.20	104.863
Kelly Petillo	Gilmore Special	Shaw	4:42:22.71	106.240
Louis Meyer	Ring Free Special	Horn	4:35:03.39	109.069
Wilbur Shaw	Shaw-Gilmore Special	Hepburn	4:24:07.80	113.580
Floyd Roberts	Burd Piston Reg. Special	Shaw	4:15:48.40	117.200
Wilbur Shaw	Boyle Special	Snyder	4:20:47.39	115.035
Wilbur Shaw	Boyle Special	Mays	4:22:31.17	114.277
M. Rose-F. Davis	Noc-Out Hose Clamp Special	Mays	4:20:36.24	115.117
No races				
George Robson	Thorne Eng. Special	Jackson	4:21:16.71	114.820
Mauri Rose	Blue Crown Special	Holland	4:17:52.17	116.338
Mauri Rose	Blue Crown Special	Holland	4:10:23.38	119.813
Bill Holland	Blue Crown Special	Parsons	4:07:15.97	121.327
Johnny Parsons	Wynn's Fiction Proof Spl.	Holland	2:46:55.97	124.002
Lee Wallard	Belanger Special	Nazaruk	3:57:38.05	126.244
Troy Ruttman	Agajanian Special	Rathmann	3:52:41.88	128.922
Bill Vukovich	Fuel Injection Spl.	Cross	3:53:01.69	128.740
Bill Vukovich	Fuel Injection Spl.	Bryan	3:49:17.27	130.840
Bob Sweikert	John Zink Special	Bettenhausen	3:53:59.53	128.209
Pat Flaherty	John Zink Special	Hanks	3:53:28.84	128.490
Sam Hanks	Belond Exhaust Special	Rathmann	3:41:14.25	135.601
Jimmy Bryan	Belond AP Special	Amick	3:44:13.80	133.791
Rodger Ward	Leader Card 500 Rdstr.	Rathmann	3:40:49.20	135.857

ties. † Race ended at 400 miles owing to heavy rain. ‡ Davis drove 180 miles, Rose 320. § 1950 race 145 miles because of rain.

CYCLING

Source: Otto Elsele, Racing Editor, *American Bicyclist*.

NATIONAL AMATEUR CHAMPIONS

Winner	Year	Winner
ur Nieminsky, New York	1940	Furman Kugler, New Jersey
Hambacher, Jew Jersey	1941	Marvin Thomson, Illinois
es Barclay, California	1945	Ted Smith, New York
ie Winter, New York	1946	Don Hester, California
Edward Merkner, Illinois	1947-48	Ted Smith, New York
y Walthour, Jr., New York	1949	James Lauf, Maryland
Connor, District of Columbia	1950	Robert Pfarr, Wisconsin
o Matteini, New York	1951	Gus Gatto, California
y Thomas, Wisconsin	1952	Steve Hromjak, Ohio
Hursey, Georgia	1953	Ronald Rhoads, California
a Simes, New Jersey	1954-58	Jack Disney, California
es Bergna, New Jersey	1959	James Rossi, Illinois
n Deras, California		

DOG SHOWS

Westminster Kennel Club Exhibition

Year	Best in show	Breed	Owner
1907-09	Ch. Warren Remedy	Fox terrier, smooth	Winthorp Rutherford
1910	Ch. Sabine Rarebit	Fox terrier, smooth	Sabine Kennels
1911	Ch. Tickle Em Jock	Scottish terrier	A. Albright, Jr.
1912	Ch. Kenmore Sorceress	Airedale terrier	William P. Wolcott
1913	Ch. Strathway Prince Albert	Bulldog	Alex H. Stewart
1914	Ch. Brentwood Hero	Old English sheep dog	Mrs. Tyler Morse
1915-16	Ch. Matford Vic	Fox terrier, wire	George W. Quintard
1917	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
1918	Ch. Haymarket Faultless	Bull terrier	R. H. Elliot
1919	Ch. Briergate Bright Beauty	Airedale terrier	G. L. L. Davis
1920	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
1921	Ch. Midkiff Seductive	Cocker spaniel	William T. Payne
1922	Ch. Boxwood Barkentine	Airedale terrier	Frederic C. Hood
1924	Ch. Barberryhill Bootlegger	Sealyham terrier	Bayard Warren
1925	Ch. Governor Moscow	Pointer	Robert F. Maloney
1926	Ch. Signal Circuit	Fox terrier, wire	Halleston Kennels
1927	Ch. Pinegrade Perfection	Sealyham terrier	Frederic C. Brown
1928	Ch. Talavera Margaret	Fox terrier, wire	R. M. Lewis
1929	Land Loyalty of Bellhaven	Collie	Mrs. Florence B. Ilch
1930-31	Ch. Pendley Calling of Blarney	Fox terrier, wire	John G. Bates
1932	Ch. Nancolleth Markable	Pointer	Gralda Farms
1933	Ch. Warland Protector of Shelterock	Airedale terrier	S. M. Stewart
1934	Ch. Flornell Spicy Bit of Halleston	Fox terrier, wire	Halleston Kennels
1935	Ch. Nunsoe Duc de la Terrace of Blakeen	Poodle	Blakeen Kennels
1936	Ch. St. Margaret Magnificent of Clairedale	Sealyham terrier	Clairedale Kennels
1937	Ch. Flornell Spicy Piece of Halleston	Fox terrier, wire	Halleston Kennels
1938	Daro of Maridor	English setter	Maridor Kennels
1939	Ferry v. Rauhelsen of Giralda	Doberman pinscher	Giralda Farms
1940-41	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
1942	Ch. Wolvey Pattern Edgerstoune	West Highland terrier	Mrs. John G. Winant
1943	Ch. Pitter Patter of Piperscroft	Miniature poodle	Mrs. P. H. B. Frelinghuysen
1944	Ch. Flornell Rare-Bit of Twin Ponds	Welsh terrier	Mrs. Edward P. Aiker
1945	Shieling's Signature	Scottish terrier	Mr. and Mrs. T. H. Snethen
1946	Ch. Hetherington Model Rhythm	Fox terrier, wire	Mr. and Mrs. T. H. Carruthers
1947	Ch. Warford of Mazelaine	Boxer	Mr. and Mrs. R. C. Kettles, Jr.
1948	Ch. Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller
1949	Ch. Mazelaine's Zazarac Brandy	Boxer	Mr. and Mrs. John P. Wagner
1950	Ch. Walsing Winning Trick of Edgerstoune	Scottish terrier	Mrs. John G. Winant
1951	Ch. Bang Away of Sirrah Crest	Boxer	Dr. and Mrs. R. C. Harris
1952-53	Ch. Rancho Dobe's Storm	Doberman pinscher	Mr. and Mrs. Len Carey
1954	Ch. Carmor's Rise and Shine	Cocker Spaniel	Mrs. Carl E. Morgan
1955	Ch. Kippax Fearnought	Bulldog	Dr. John A. Saylor
1956	Ch. Wilber White Swan	Toy poodle	Bertha Smith
1957	Ch. Shirkhan of Grandeur	Afghan	Sunny Shay-Dorothy Chenade
1958	Ch. Puttencove Promise	Standard poodle	Mr. and Mrs. George Putnam
1959	Ch. Fontclair Festoon	Miniature Poodle	Clarence Dillon

SKI JUMPING

National Records

Source: Harold A. Grinden, Historian, National Ski Association of America, Duluth, Minn.

Year	Made by and place	Feet	Year	Made by and place	Feet
1887	Mikkel Hemmestvedt, Red Wing, Minn.	37	1919	Lars Haugen, Steamboat Springs, Colo.	21
1904	T. Walters, Ishpeming, Mich.	82	1920	Anders Haugen, Dillon, Colo.	21
1905	Julius Kulstad, Ishpeming, Mich.	97½	1932	Glen Armstrong, Salt Lake City	27
1907	Ole Feiring, Duluth, Minn.	112	1934	John Elvrum, Big Pines, Calif.	24
1907	Ole Mangseth, Red Wing, Minn.	114	1937	Alf Engen, Salt Lake City, Utah	24
1908	John Evenson, Duluth, Minn.	116	1939	Alf Engen, Big Pines, Calif.	25
1908	John Mangseth, Duluth, Minn.	117	1939	Bob Roecker, Iron Mountain, Mich.	25
1908	John Evenson, Ishpeming, Mich.	122	1941	Torger Tokle, Leavenworth, Wash.	27
1909	Ole Larson, Eau Claire, Wis.	131	1941	Torger Tokle, Olympian Hill, Hyak, Wash.	28
1910	Oscar Gunderson, Chippewa Falls, Wis.	138	1942	Torger Tokle, Iron Mountain, Mich.	29
1910	August Nordby, Ishpeming, Mich.	140	1949	Sverre Kongsgaard, Hyak, Wash.	28
1911	Anders Haugen, Ironwood, Mich.	152	1949	Joe Perrault, Iron Mountain, Mich.	29
1913	Ragnar Omtvedt, Ironwood, Mich.	154-158-169	1950	Art Devlin, Steamboat Springs, Colo.	30
1916	Ragnar Omtvedt, Steamboat Springs, Colo.	192½	1951	Ansten Samuelstuen, Steamboat Springs, Colo.	31
1917	Henry Hall, Steamboat Springs, Colo.	203	1959	Jim Brennan, Iron Mountain, Mich.	31
1919	Anders Haugen, Dillon, Colo.	213			

WORLD ALL-TACKLE FISHING RECORDS

Caught with Rod and Reel in Salt Water

Source: International Game Fish Association.

Species	Lb., oz.	Length	Girth	Where caught	Year	Angler
Black Sea	69	42"	32½"	St. Helena	1956	P. Allen
White Sea	120—8	62"	40"	Kona, T. H.	1955	C. W. McAlpin
Atlantic	103—4	66"	31¼"	West End, Bahamas	1932	C. E. Benet
Black Sea	514	86"	82"	San Clemente, Calif.	1955	J. Patterson
White Sea	83—12	65½"	34"	Baja California, Mex.	1953	L. C. Baumgardner
Atlantic	83	52"	29"	Cape Charles, Va.	1949	Zack Waters, Jr.
Atlantic	8	22"	19"	Nantucket Sound, Mass.	1951	H. R. Rider
Atlantic	551	100"	.....	Galveston Bay, Texas	1937	G. Pangarakis
Atlantic	73	60"	30½"	Vineyard Sound, Mass.	1913	C. B. Church
(Tautog)	21—6	31½"	23½"	Cape May, N. J.	1954	R. N. Sheaffer
Atlantic	24—3	41"	22"	San Miguel, Azores	1953	M. da Silva Veloso
Atlantic	39—15	39"	28"	Walker Cay, Bahamas	1952	F. Crowley
Atlantic	102	70"	34"	Cape Charles, Va.	1938	J. E. Stansbury
Atlantic	74—4	66"	43"	Boothbay Harbor, Me.	1960	James J. Duggan
Atlantic	76	63"	.....	Acapulco, Mexico	1957	R. G. Stotsbery
Atlantic	94—4	51½"	42"	Cape Charles, Va.	1957	James L. Johnson
Atlantic	21—4	36½"	35"	Martencillo, Chile	1959	D. V. Serrano
Atlantic	77	65"	29"	Blmini, Bahamas	1957	C. O. Potts
Atlantic	1560	174"	81"	Cabo Blanco, Peru	1953	A. C. Glassel, Jr.
Atlantic	780	156¾"	66"	San Juan, P. R.	1959	Eric Widdowson
Atlantic	1002	175½"	74"	Honolulu	1954	G. S. Parker, Jr.
Atlantic	911	160"	76"	Kona, Hawaii	1957	Dale Scott
Atlantic	692	161"	.....	Balboa, California	1931	A. Hamann
Atlantic	161	104"	33"	Miami, Florida	1938	L. F. Hooper
Atlantic	40	47½"	28"	Rockport, Mass.	1958	Walter F. Church
Atlantic	114	64"	33"	La Paz, Mexico	1960	Abe Sackheim
Atlantic	123	44"	32¾"	Walker Cay, Bahamas	1950	H. Teetor
Atlantic	221	129"	.....	Santa Cruz Is., Galapagos Is.	1947	C. W. Stewart
Atlantic	890—8	193"	92"	Fort Amador, Canal Zone	1960	Jack Wagner
Atlantic	1000	144"	.....	Mayor Island, N. Z.	1943	B. D. H. Ross
Atlantic	366—8	100"	46"	Montauk, N. Y.	1960	D. P. Walker
Atlantic	922	.....	.....	Bay of Islands, N. Z.	1937	W. W. Dowding
Atlantic	1422	163"	95"	Cape Moreton, Australia	1958	J. H. Robinson
Atlantic	2664	202"	114"	South Australia	1959	Alfred Dean
Atlantic	50—8	55"	.....	Gatun Spillway, Canal Zone	1944	J. W. Anderson
Atlantic	1182	179¾"	78"	Iquique, Chile	1953	L. E. Marron
Atlantic	283	86 3/5"	.....	Lake Maracaibo, Venezuela	1956	M. Salazar
Atlantic	266—8	82½"	49½"	Kona, T. H.	1959	Brooks Kelley
Atlantic	215	69"	49"	Cape Point, Africa	1959	H. J. Pederson
Atlantic	44—8	41½"	28½"	Capetown, South Africa	1957	G. B. Mercorio
Atlantic	977	116"	94½"	St. Ann Bay, Nova Scotia	1950	D. McL. Hodgson
Atlantic	435	93"	68½"	Cabo Blanco, Peru	1957	R. V. A. Lee
Atlantic	17—8	46"	19"	Mullica River, N. J.	1944	A. Weisbecker, Jr.
Atlantic	15—3	34½"	20½"	Fort Pierce, Fla.	1949	C. W. Hubbard
Atlantic	105—12½	65"	40"	Bahia de Topolobampo, Mexico	1955	M. A. Yant

Caught with Rod and Reel in Fresh Water

Source: Mary Ball, Field & Stream.

Largemouth	22—4	32½"	28½"	Montgomery Lake, Ga.	1932	George W. Perry
Smallmouth	11—15	27"	21½"	Dale Hollow Lake, Ky.	1955	David L. Hayes
Yellowfin	4—12	15"	18½"	Ketona Lake, Ala.	1950	T. S. Hudson
Atlantic	55—5	42"	31"	Clearwater Lake, Minn.	1952	Frank J. Ledwine
Atlantic	57	44.2"	32.8"	Lake Moultrie, S. C.	1960	C. B. Dennis
Atlantic	69—15	64½"	31¾"	St. Lawrence River, N. Y.	1957	Arthur Lawton
Atlantic	4—12	19½"	13"	Messalonskee Lake, Maine	1949	Mrs. Earl Small
Atlantic	4—3½	.....	.....	Bordentown, New Jersey	1865	Dr. C. C. Abbot
Atlantic	9—3	27"	.....	Medford Lakes, N. J.	1957	Frank McGovern
Atlantic	46—2	52½"	25"	Sacandaga Reservoir, N. Y.	1940	Peter Dubuc
Atlantic	79—2	.....	.....	Tanaelv, Norway	1928	Henrik Henriksen
Atlantic	92	58½"	36"	Skeena River, B. C.	1959	Heinz Wichmann
Atlantic	22—8	36"	.....	Sabago Lake, Maine	1907	Edward Blakely
Atlantic	31	.....	.....	Cowichan Bay, B. C.	1947	Mrs. Lee Hallberg
Atlantic	14—8	31½"	11½"	Nipigon River, Ontario	1916	Dr. W. J. Cook
Atlantic	39—8	.....	.....	Loch Awe, Scotland	1866	W. Muir
Atlantic	32	40½"	29¾"	Lake Pend Oreille, Idaho	1949	N. L. Higgins
Atlantic	63—2	51½"	32¾"	Lake Superior	1952	Hubert Hammers
Atlantic	37	40½"	28"	Lake Pend Oreille, Idaho	1947	Wes Hamlet
Atlantic	25	41"	29"	Cedar Bluff, Tenn.	1960	Mabry Harper

BILLIARDS

APPARENTLY nobody knows where billiards originated. Some trace the game back to ancient Greece or early Egyptian days; others insist it originated in France or England in medieval times. Shakespeare must have believed the Egyptian tale, because in *Antony and Cleopatra* he has Cleopatra saying: "Let's to billiards; come, Charmian." There is an illustration of Louis XIV of France playing billiards in 1694 and using a shovel-shaped stick to set the "cue ball" in motion, from which it is evident that the pointed cue was a later development.

Certainly the game was popular in England and on the Continent in the seven-

teenth and eighteenth centuries and early settlers in North America are supposed to have introduced the game here. How to play "English" to a billiard ball was covered by Jack Carr, an Englishman, in 1820. A Frenchman named Mingaud is credited with having invented the "draw" shot at about the same time and also have devised leather tips for wooden cues. In the 19th century, when the first World Championship competition, amateur and professional, is a modern development in billiards. The first formal professional tournament held in the United States took place in New York in 1863 with eleven players competing. The first three-cushion tournament was held in St. Louis in 1874.

Billiards Statistics

Source: John Canelli, Secretary, The Billiard Congress of America.

World Three-cushion Champions

1878	Leon Magnus	1911	Alfredo DeOro	1917-18	Alfredo DeOro	1931	Arthur Thurnbush
1899	W. H. Catton	1912	Joe Carney	1918-19	Augie Kieckhefer	1932	Augie Kieckhefer
1900	Eugene Carter	1912	John Horgan	1919	Alfredo DeOro	1933	Welker Cochran
1900	Lloyd Jevne	1913-14	Alfredo DeOro	1919	R. L. Cannafax	1934	John Layton
1907	Harry P. Cline	1915	George Moore	1920	John Layton	1935	Welker Cochran
1908	John Daly	1915	William H. Huey	1921	Augie Kieckhefer	1936	Willie Hoppe
1908	Thomas Hueston	1916	Alfredo DeOro	1921-23	John Layton	1937-38	Welker Cochran
1908-09	Alfredo DeOro	1916	Charles Ellis	1923	Tiff Denton	1939	Joe Chamaco
1910	Fred Eames	1916	Charles McCourt	1924-25	R. L. Cannafax	1940-44	Willie Hoppe
1910	Alfredo DeOro	1916	Hugh Heal	1926-27	Otto Reiselt	1944-45	Welker Cochran
1910	John Daly	1916	George Moore	1927	Augie Kieckhefer	1947-52	Willie Hoppe
1910	Thomas Hueston	1917	Charles McCourt	1928	Otto Reiselt	1953	Ray Kilgore
1911	John Daly	1917	R. L. Cannafax	1928-30	John Layton	1954-59	No tournament

World Pocket Billiard Champions

1878-80	Cyrille Dion	1899-1900	Alfredo DeOro	1912	R. J. Ralph	1936	James Caras
1881	Gottlieb Wahlstrom	1901	Frank Sherman	1913	Alfredo DeOro	1937	Ralph Greenleaf
1882-83	Albert Frey	1901	Alfredo DeOro	1913-15	Bennie Allen	1938-39	James Caras
1884	J. L. Malone	1902	William Clearwater	1916	Emmet Blankenship	1940	Andrew Ponzi
1886-87	Alfred Frey	1902	Grant Eby	1916	John Layton	1941	Willie Mosconi
1887	J. L. Malone (f)	1903-04	Alfredo DeOro	1916-18	Frank Taberski	1941	Erwin Rudolph
1887-88	Alfredo DeOro	1905	Jerome Keogh (f)	1919-24	Ralph Greenleaf	1942	Irving Crane
1888	Frank Powers	1905	Alfredo DeOro	1925	Frank Taberski	1942	Willie Mosconi
1889	Albert Frey	1905	Thomas Hueston (f)	1926	Ralph Greenleaf	1943	Andrew Ponzi
1889	Alfredo DeOro	1906	Thomas Hueston	1926	Erwin Rudolph	1943-45	Willie Mosconi
1890	H. Manning	1906	John Horgan	1926	Thomas Hueston	1946	Irving Crane
1891	Frank Powers (f)	1906	Jerome Keogh	1927	Frank Taberski	1946-48	Willie Mosconi
1892-94	Alfredo DeOro	1907-08	Thomas Hueston	1927-28	Ralph Greenleaf	1949	James Caras
1895	William Clearwater	1908	Frank Sherman	1928	Frank Taberski	1950-53	Willie Mosconi
1895	Alfredo DeOro	1908	Alfredo DeOro	1929	Ralph Greenleaf	1954	No tournament
1896	Frank Stewart (f)	1909	Charles Weston	1929	Frank Taberski	1955	Irving Crane
1897	Grant Eby	1909	John Kling	1930	Erwin Rudolph	1955	Willie Mosconi
1897	Jerome Keogh	1910	Thomas Hueston	1930-32	Ralph Greenleaf	1956-59	No tournament
1898	William Clearwater	1910	Jerome Keogh	1933-34	Erwin Rudolph		(f) Fortell.
1898	Jerome Keogh	1910-12	Alfredo DeOro	1935	Andrew Ponzi		

National Amateur Three-cushion Champions

Since 1945, tournament has been limited to athletic clubs and identified as the national amateur invitational three-cushion billiard championship.

1910—Pierre Maupome	1925-26—Dr. A. J. Harris	1930—R. B. Harper	1946—Edward Lee
1911—Charles Morin	1927—Robert M. Lord	1931—Frank Flemming	1946-48—Robert M. Lord
1919—Arthur Newman	1927—Dr. L. P. Macklin	1931-35—Edward Lee	1948—C. T. Vandover
1920—W. B. Huey	1928—J. N. Bozeman	1936—Edward Lee*	1948-53—Edward Lee
1921—Earl Lookabaugh	1929—Charles Jordan	1937—A. Primeau	1954—Lee Lerner
1922—Frank Flemming	1929—Max Shimon	1938—Gene Deardorff	1955—No tournament
1923—Robert M. Lord	1930—Joseph Hall	1939-40—Gene Deardorff	1956—Edward Lee
1924—Frank Flemming	1930—Max Shimon	1945-46—C. T. Vandover	1957—Stanhope Adam
			1958-59—Edward Lee

* World champion.

† Match.

SOCCER

Source: Flannery News Bureau of New York.

National Challenge Cup

Emblematic of U. S. Championship

(Senior amateur and professional elevens)

Brooklyn (N. Y.) Field Club
 Bethlehem (Pa.) Steel Co. F. C.
 Fall River (Mass.) Rovers
 Bethlehem (Pa.) Steel Co. F. C.
 Ben Miller F. C., St. Louis, Mo.
 Robins Dry Dock F. C., Brooklyn, N. Y.
 Scullin Steel F. C., St. Louis, Mo.
 Paterson (N. J.) F. C.
 Fall River (Mass.) F. C.
 Shawsheen S. C., Andover, Mass.
 Bethlehem (Pa.) Steel Co. F. C.
 Fall River (Mass.) F. C.
 New York Nationals S. C.
 Hakoah All-Stars, New York
 Fall River (Mass.) F. C.
 New Bedford (Mass.) F. C.
 Stix, Baer & Fuller F. C., St. Louis, Mo.
 Central Breweries S. C., St. Louis, Mo.
 First German American S. C., Philadelphia
 New York Americans S. C.
 Sparta A. B. A., Chicago, Ill.
 St. Mary's Celtic S. C., New York
 No official champion*
 Pawtucket (R. I.) F. C.
 Gallatin S. C., Pittsburgh
 Brooklyn (N. Y.) Hispano S. C.
 Brookhattan S. C., New York
 Vikings, Chicago
 Ponta Delgada F. C., Fall River, Mass.
 Joe Simpkins S. C., St. Louis, Mo.
 Morgan (Pa.) S. C.
 Joe Simpkins S. C., St. Louis, Mo.
 German-Hungarian S. C., New York
 Farmerville (Pa.) S. C.
 Chicago Falcons
 New York Americans
 Eintracht S. C., New York
 Farmerville (Pa.) Hurricanes
 Kutis, St. Louis
 Los Angeles Kickers
 McIlwaine Canvasbaks, San Pedro, Calif.
 Ballists: Baltimore (Md.) S. C. and Sparta A. B. A., Ill.

National Amateur Challenge Cup

1923 No official champion*
 1924 Fleisher Yarn F. C., Philadelphia
 1925 Toledo (Ohio) F. C.
 1926 Defenders F. C., New Bedford, Mass.
 1927 Heidelberg (Pa.) F. C.
 1928 No official champion†
 1929 Heidelberg (Pa.) F. C.
 1930 Raffles F. C., Fall River, Mass.
 1931 Goodyear F. C., Akron, Ohio
 1932 Shamrock S. C., Cleveland, Ohio
 1933 German American S. C., Philadelphia
 1934 German American S. C., Philadelphia
 1935 W. W. Riehl S. C., Castle Shannon, Pa.
 1936 First German S. C., Brooklyn, N. Y.
 1937 Highlander F. C., Trenton, N. J.
 1938 Ponta Delgada F. C., Fall River, Mass.
 1939 St. Michael's A. C., Fall River, Mass.
 1940 Morgan-Strasser S. C., Morgan, Pa.
 1941 Fall River (Mass.) S. C.
 1942 Fall River (Mass.) S. C.
 1943 Morgan-Strasser S. C., Morgan, Pa.
 1944 Eintracht S. C., New York
 1945 Eintracht S. C., New York
 1946 Ponta Delgada F. C., Fall River, Mass.
 1947 Ponta Delgada F. C., Fall River, Mass.
 1948 Ponta Delgada F. C., Fall River, Mass.
 1949 Elizabeth (N. J.) Sport Club
 1950 Ponta Delgada F. C., Fall River, Mass.
 1951 German-Hungarian S. C., New York
 1952 St. Louis Raiders
 1953 Ponta Delgada, Fall River, Mass.
 1954 Beadling (Pa.) S. C.
 1955 Heidelberg (Pa.) Tornados
 1956 Kutis, St. Louis
 1957 Kutis, St. Louis
 1958 Kutis, St. Louis
 1959 Kutis, St. Louis

* Medals to semifinalists: Fleisher Yarn F. C., Philadelphia; Roxbury (Mass.) F. C.; Jeannette (Pa.) F. C.; Swedish American A. A., Chicago, Ill. † Finalists: Powers-Hudson-Essex F. C., Fall River, Mass.; and Swedish American A. C., Detroit, Mich.

BOBSLEDDING

National Records

Made at Mt. Van Hoesenberg slide, Lake Placid, N. Y., the only bobsled run in America

Mile Course

(Times in minutes and seconds)

(single heat)—Eugenio Monti, Italy—Gary Old, Saranac Lake, N. Y. (Feb. 14, 1960).... 1:12.00
 (4 heats)—Stan Benham—Pat Martin, Sno of Lake Placid (Feb. 16, 1957)..... 4:52.83
 (single heat)—Stan Benham, driver; Pat Charles Pandolph; John Helmer, brake, rds of Lake Placid (Feb. 22, 1957)..... 1:08.88
 (4 heats)—Eugenio Monti, Italy, driver; Pat Massena, N. Y.; Gary Sheffield, Lake N. Y.; Charles Pandolph, Saranac Lake, brake (Feb. 21, 1960)..... 4:38.66

Half-Mile Course

2-man (single heat)—Fred Fortune—John Young, Lake Placid B. C. (Jan. 3, 1959)..... 0:38.80
 2-man (4 heats)—Fred Fortune—John Young, Lake Placid B. C. (Jan. 3, 1959)..... 2:36.76
 4-man (single heat)—James Bickford, driver; Pat Buckley; Lucien Miron; William Dupree, brake, Saranac Lake B. C. (Jan. 27, 1946)..... 0:37.08
 4-man (4 heats)—James Bickford, driver; Pat Buckley; Lucien Miron; William Dupree, brake, Saranac Lake B. C. (Jan. 27, 1946)..... 2:29.07

Standard Measurements in Sports

BASEBALL

- Home plate to pitcher's box—60 feet 6 inches.
- Plate to second base—127 feet $3\frac{3}{8}$ inches.
- Distance from base to base (home plate included)—90 feet.
- Size of bases—15 inches by 15 inches.
- Pitcher's plate—24 inches by 6 inches.
- Batter's box—6 feet by 4 feet.
- Home plate—17 inches by 17 inches, cut to a point at rear.
- Home plate to backstop—Not less than 60 feet (recommended).
- Weight of ball—Not less than 5 ounces nor more than $5\frac{1}{4}$ ounces.
- Circumference of ball—Not less than 9 inches nor more than $9\frac{1}{4}$ inches.
- Bat—Must be round, not over $2\frac{3}{4}$ inches in diameter at thickest part, nor more than 42 inches in length, and of hardwood in one piece or laminated.

FOOTBALL

- Length of field—120 yards.*
- Width of field— $53\frac{1}{3}$ yards (160 feet).
- Height of goal posts—20 feet.
- Height of crossbar—10 feet.
- Width of goal posts—23 feet 4 inches, inside to inside, and not more than 24 feet, outside to outside.
- Length of ball—11 to 11.25 inches (long axis).
- Circumference of ball—21.25 to 21.50 inches (middle); 28 to 28.5 inches (long axis).

* Includes 10 yards of end zone on either side.

LAWN TENNIS

- Size of court—Rectangle 78 feet long and 27 feet wide (singles); 78 feet long and 36 feet wide (doubles).
- Height of net—3 feet in center, gradually rising to reach 3-foot 6-inch posts at each side of court.
- Ball—Shall be more than $2\frac{1}{2}$ inches and less than $2\frac{5}{8}$ inches in diameter and weigh more than 2 ounces and less than $2\frac{1}{16}$ ounces.
- Service line—21 feet from net.

ICE HOCKEY

- Size of rink—200 feet long by 85 feet wide (desired size).
- Size of goal—6 feet wide by 4 feet in height.
- Puck—1 inch thick and 3 inches in diameter; made of vulcanized rubber; weight—six ounces (unofficial).
- Length of stick—Not more than 53 inches from heel to end of shaft nor $14\frac{3}{4}$ inches from heel to end of blade. Blade should not exceed 3 inches in height, except goalkeeper's stick, which shall not exceed $3\frac{1}{2}$ inches in height except at the heel, where it must not exceed $4\frac{1}{2}$ inches.

BOWLING

- Lane dimensions—Overall length 62 feet 10 $\frac{3}{16}$ inches, measuring from foul line to pit (not including tail plank), with $\frac{1}{2}$ inch tolerance permitted. Foul line to No. 1 pinspot 60 feet, with $\frac{1}{2}$ inch tolerance permitted. Lane width, not less than 41 inches, nor more than 42. Approach, not less than 15 feet. Gutters not less than 9 inches nor more than 9 inches wide.
- Ball—Circumference, not more than 21 inches. Weight, 10 pounds minimum, 16 pounds maximum. Balance, tolerance of 3 ounces between top finger hole side and bottom. One ounce tolerance between right and left sides. One ounce tolerance between front and back sides.

GOLF

- Weight of ball—Not greater than 1.35 ounces.
- Size of ball—Not less than 1.680 inches in diameter.
- Velocity of ball—Not greater than 250 feet per second when tested on U.S.G.A. apparatus, with 2 per cent tolerance.
- Hole—Shall be $4\frac{1}{4}$ inches in diameter and at least 4 inches deep.
- Clubs—Fourteen is the maximum number permitted.

BASKETBALL

(National Collegiate A. A. Rules)

- Playing court—94 feet long by 50 feet wide (maximum dimensions).
- Baskets—Rings 18 inches in inside diameter, with white cord nets, 15 to 18 inches in length. Each ring is made of metal and is not more than $\frac{5}{8}$ of an inch in diameter.
- Height of basket ring—10 feet.
- Weight of ball—Not less than 20 ounces nor more than 22.
- Circumference of ball—No greater than 21 inches and not less than $29\frac{1}{2}$.
- Free-throw line—15 feet from the face of the backboard.

BOXING

- Size of ring—Professional matches take place in an area not less than 18 nor more than 20 feet square. It is enclosed by three covered ropes, each not less than one inch in diameter. The floor has a 2-inch padding that extends at least 6 inches beyond the roped area. In the case of elevated rings and 3 feet from the ring is at floor level.
- Gloves—In professional fights, 8-ounce gloves generally are used, except in title contests, where 6-ounce gloves are the custom. A.A.U., 8 ounces up to welter weight, 10 ounces in heavier divisions. Colleges, minimum of 12 ounces.

HORSE RACING

IENT DRAWINGS on stone and bone prove that horse racing is at least years old, but Thoroughbred Racing modern development. Practically every oughbred in training today traces its ered ancestry back to one or more of sires that arrived in England about from the Near East and became n, from the names of their owners, e Byerly Turk, the Darley Arabian the Godolphin Arabian. The Jockey (English) was founded at Newmarket 50 or 1751 and became the custodian e Stud Book as well as the court of esort in deciding turf affairs.

ere was horse racing in this country e the Revolution, but the great lift e breeding industry came with the rtation in 1798, by Col. John Hoomes rginia, of Diomed, winner of the Ep- Derby of 1780. Diomed's lineal de- ants included such famous stars of merican turf as American Eclipse and gton. From 1800 to the time of the War there were race courses and ing establishments plentifully scat- through Virginia, North Carolina, Carolina, Tennessee, Kentucky, and

Louisiana. In fact, thoroughbred racing was largely a Southern sport and that was one reason why the Confederacy had such excellent cavalry in the Civil War. A century ago crack horses were matched in four-mile races that were run in heats, best two out of three!

The oldest stake event in North America is the Queen's Plate, a Canadian fixture that was first run in the Province of Quebec in 1836. The oldest stake event in the United States is The Travers, which was first run at Saratoga in 1864. The gambling that goes with horse racing and trickery by jockeys, trainers, owners, and track officials caused attacks on the sport by reformers and a demand among horse racing enthusiasts for an honest and effective control of some kind, but nothing of lasting value to racing came of this until the formation of The Jockey Club in 1894. The Jockey Club, composed of about sixty members chosen from the aristocracy of the turf, was all-powerful in racing regulation until the State Racing Commissions came into being as a result of mutual betting and the great revenues that came with the tax on the "daily handle."

Horse Racing Statistics

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HISTORY OF THE AMERICAN TRIPLE CROWN

BELMONT STAKES

Belmont Park; 3-year-olds; 1½ miles.

at Jerome Park prior to 1890; run at Morris Park from 1890 to 1905. Distance 1½ miles prior to 1874; re- o 1½ miles, 1874; reduced to 1¼ miles, 1890; changed to 1½ miles, 1893; increased to 1½ miles, 1895; in- to 1½ miles, 1896; changed to 1½ miles in 1904 and 1905; increased to 1½ miles, 1926.

Winner	Jockey	Wt.	Win val.	1896	Hastings.....	H. Griffin.....	122	3,025
uthless.....	J. Gilpatrick....	107	\$ 1,850	1897	Scottish Chieftain.....	J. Scherrer.....	115	3,550
eneral Duke.....	R. Swim.....	110	2,800	1898	Bowling Brook.....	F. Littlefield.....	122	7,810
onian.....	C. Miller.....	110	3,350	1899	Jean Bereaud.....	R. Clawson.....	122	9,445
ngfisher.....	W. Dick.....	110	3,750	1900	Ildrim.....	N. Turner.....	126	14,790
arry Bassett.....	W. Miller.....	110	5,450	1901	Commando.....	H. Spencer.....	126	11,595
e Daniels.....	J. Rowe.....	110	4,500	1902	Masterman.....	J. Bullman.....	126	13,220
pringbok.....	J. Rowe.....	110	5,200	1903	Africander.....	J. Bullman.....	126	12,285
xon.....	G. Bardee.....	110	4,200	1904	Delhi.....	G. Odom.....	126	11,575
lvin.....	R. Swim.....	110	4,450	1905	Tanya.....	E. Hildebrand.....	121	17,240
gerine.....	W. Donohue.....	110	3,700	1906	Burgomaster.....	L. Lyne.....	126	22,700
overbrook.....	C. Holloway.....	110	5,200	1907	Peter Pan.....	G. Mountain.....	126	22,765
ke of Magenta.....	L. Hughes.....	118	3,850	1908	Colin.....	J. Notter.....	126	22,765
endthrift.....	S. Evans.....	118	4,250	1909	Joe Madden.....	E. Dugan.....	126	24,550
enada.....	L. Hughes.....	118	2,800	1910	Sweep.....	J. Butwell.....	126	9,700
unterer.....	T. Costello.....	118	3,000	1913	Prince Eugene.....	R. Troxler.....	109	2,825
rester.....	J. McLaughlin.....	118	2,600	1914	Luke McLuke.....	M. Buxton.....	126	3,025
orge Kinney.....	J. McLaughlin.....	118	3,070	1915	The Finn.....	G. Byrne.....	126	1,825
inique.....	J. McLaughlin.....	118	3,150	1916	Friar Rock.....	E. Haynes.....	126	4,100
rant.....	P. Duffy.....	118	2,710	1917	Hourless.....	J. Butwell.....	126	5,800
pector B.....	J. McLaughlin.....	118	2,720	1918	Johren.....	F. Robinson.....	126	8,950
novor.....	J. McLaughlin.....	118	2,900	1919	Sir Barton.....	J. Loftus.....	126	11,950
Dixon.....	J. McLaughlin.....	118	3,440	1920	Man o' War.....	C. Kummer.....	126	7,950
c.....	W. Hayward.....	118	4,960	1921	Grey Lag.....	E. Sande.....	126	8,650
rlington.....	S. Barnes.....	118	8,560	1922	Pillory.....	C. H. Miller.....	126	39,200
ford.....	E. Garrison.....	118½	5,070	1923	Zev.....	E. Sande.....	126	38,000
ron.....	W. Hayward.....	122	6,610	1924	Mad Play.....	E. Sande.....	126	42,880
manche.....	W. Simms.....	117	5,310	1925	American Flag.....	A. Johnson.....	126	38,500
ry of Navarre.....	W. Simms.....	117	6,680	1926	Crusader.....	A. Johnson.....	126	48,550
mar.....	F. Taral.....	119	2,700	1927	Chance Shot.....	E. Sande.....	126	60,910

Belmont Stakes (Cont.)

1928	Vito.....	C. Kummer.....	126	63,430	1944	Bounding Home.....	G. L. Smith.....	126	55
1929	Blue Larkspur.....	M. Garner.....	126	59,650	1945	Pavot.....	E. Arcaro.....	126	52
1930	Gallant Fox.....	E. Sande.....	126	66,040	1946	Assault.....	W. Mehrrens.....	126	75
1931	Twenty Grand.....	C. Kertsinger.....	126	58,770	1947	Phalanx.....	R. Donoso.....	126	78
1932	Faireno.....	T. Malley.....	126	55,120	1948	Citation.....	E. Arcaro.....	126	77
1933	Hurryoff.....	M. Garner.....	126	49,490	1949	Capot.....	T. Atkinson.....	126	60
1934	Peace Chance.....	W. D. Wright.....	126	43,410	1950	Middleground.....	W. Boland.....	126	61
1935	Omaha.....	W. Saunders.....	126	35,480	1951	Counterpoint.....	D. Gorman.....	126	82
1936	Granville.....	J. Stout.....	126	29,800	1952	One Count.....	E. Arcaro.....	126	8
1937	War Admiral.....	C. Kertsinger.....	126	38,020	1953	Native Dancer.....	E. Guerin.....	126	8
1938	Pasteurized.....	J. Stout.....	126	34,530	1954	High Gun.....	E. Guerin.....	126	8
1939	Johnstown.....	J. Stout.....	126	37,020	1955	Nashua.....	E. Arcaro.....	126	83
1940	Bimelech.....	F. A. Smith.....	126	35,030	1956	Needles.....	D. Erb.....	126	83
1941	Whirlaway.....	E. Arcaro.....	126	39,770	1957	Gallant Man.....	W. Shoemaker.....	126	77
1942	Shut Out.....	E. Arcaro.....	126	44,520	1958	Cavan.....	P. Anderson.....	126	73
1943	Count Fleet.....	J. Longden.....	126	35,340	1959	Sword Dancer.....	W. Shoemaker.....	126	92

KENTUCKY DERBY

Churchill Downs; 3-year-olds; 1¼ miles.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1875	Aristides.....	O. Lewis.....	100	\$2,850	1917	Omar Khayyam.....	C. Borel.....	117	16.6
1876	Vagrant.....	R. Swim.....	97	2,950	1918	Exterminator.....	W. Knapp.....	114	14.7
1877	Baden Baden.....	W. Walker.....	100	3,300	1919	Sir Barton.....	J. Loftus.....	112½	20.8
1878	Day Star.....	J. Carter.....	100	4,050	1920	Paul Jones.....	T. Rice.....	126	30.3
1879	Lord Murphy.....	C. Schauer.....	100	3,550	1921	Behave Yourself.....	C. Thompson.....	126	36.4
1880	Fonso.....	G. Lewis.....	105	3,800	1922	Morvich.....	A. Johnson.....	126	46.7
1881	Hindoo.....	J. McLaughlin.....	105	4,410	1923	Zev.....	E. Sande.....	126	53.6
1882	Apollo.....	B. Hurd.....	102	4,560	1924	Black Gold.....	J. D. Mooney.....	126	52.7
1883	Leonatus.....	W. Donohue.....	105	3,760	1925	Flying Ebony.....	E. Sande.....	126	52.5
1884	Buchanan.....	I. Murphy.....	110	3,990	1926	Bubbling Over.....	A. Johnson.....	126	50.0
1885	Joe Cotton.....	E. Henderson.....	110	4,630	1927	Whiskery.....	L. McAtee.....	126	51.0
1886	Ben Ali.....	P. Duffy.....	118	4,890	1928	Reigh Count.....	C. Lang.....	126	55.3
1887	Montrose.....	I. Lewis.....	118	4,200	1929	Clyde Van Dusen.....	L. McAtee.....	126	53.9
1888	Macbeth II.....	G. Covington.....	115	4,740	1930	Gallant Fox.....	E. Sande.....	126	50.7
1889	Spokane.....	T. Kiley.....	118	4,970	1931	Twenty Grand.....	C. Kertsinger.....	126	48.8
1890	Riley.....	I. Murphy.....	118	5,460	1932	Burgoo King.....	E. James.....	126	52.9
1891	Kingman.....	I. Murphy.....	122	4,680	1933	Brokers Tip.....	D. Meade.....	126	48.9
1892	Azra.....	A. Clayton.....	122	4,230	1934	Cavalcade.....	M. Garner.....	126	28.1
1893	Lookout.....	E. Kunze.....	122	4,090	1935	Omaha.....	W. Saunders.....	126	39.5
1894	Chant.....	F. Goodale.....	122	4,020	1936	Bold Venture.....	I. Hanford.....	126	37.7
1895	Halma.....	J. Perkins.....	122	2,970	1937	War Admiral.....	C. Kertsinger.....	126	52.0
1896	Ben Brush.....	W. Simms.....	117	4,850	1938	Lawrin.....	E. Arcaro.....	126	47.0
1897	Typhoon II.....	F. Garner.....	117	4,850	1939	Johnstown.....	J. Stout.....	126	46.3
1898	Plaudit.....	W. Simms.....	117	4,850	1940	Gallahadion.....	C. Bierman.....	126	60.1
1899	Manuel.....	F. Taral.....	117	4,850	1941	Whirlaway.....	E. Arcaro.....	126	61.2
1900	Lieut. Gibson.....	J. Boland.....	117	4,850	1942	Shut Out.....	W. D. Wright.....	126	64.2
1901	His Eminence.....	J. Winkfield.....	117	4,850	1943	Count Fleet.....	J. Longden.....	126	60.7
1902	Alan-a-Dale.....	J. Winkfield.....	117	4,850	1944	Pensive.....	C. McCreary.....	126	64.6
1903	Judge Himes.....	H. Booker.....	117	4,850	1945	Hoop Jr.....	E. Arcaro.....	126	64.8
1904	Elwood.....	F. Prior.....	117	4,850	1946	Assault.....	W. Mehrrens.....	126	96.4
1905	Agile.....	J. Martin.....	122	4,850	1947	Jet Pilot.....	E. Guerin.....	126	92.1
1906	Sir Huon.....	R. Troxler.....	117	4,850	1948	Citation.....	E. Arcaro.....	126	83.4
1907	Pink Star.....	A. Minder.....	117	4,850	1949	Ponder.....	S. Brooks.....	126	91.6
1908	Stone Street.....	A. Pickens.....	117	4,850	1950	Middleground.....	W. Boland.....	126	92.6
1909	Wintergreen.....	V. Powers.....	117	4,850	1951	Count Turf.....	C. McCreary.....	126	98.0
1910	Donau.....	F. Herbert.....	117	4,850	1952	Hill Gail.....	E. Arcaro.....	126	96.3
1911	Meridian.....	G. Archibald.....	117	4,850	1953	Dark Star.....	H. Moreno.....	126	90.0
1912	Worth.....	C. H. Shilling.....	117	4,850	1954	Determine.....	R. York.....	126	102.0
1913	Donerail.....	R. Goose.....	117	5,475	1955	Swaps.....	W. Shoemaker.....	126	108.4
1914	Old Rosebud.....	J. McCabe.....	114	9,125	1956	Needles.....	D. Erb.....	126	123.4
1915	Regret.....	J. Notter.....	112	11,450	1957	Iron Liege.....	W. Hartack.....	126	107.9
1916	George Smith.....	J. Loftus.....	117	9,750	1958	Tim Tam.....	I. Valenzuela.....	126	116.4
					1959	Tomy Lee.....	W. Shoemaker.....	126	119.6

"TRIPLE CROWN" WINNERS IN THE UNITED STATES
(Kentucky Derby, Preakness and Belmont Stakes)

Year	Horse	Owner	Year	Horse	Owner
1919	Sir Barton.....	J. K. L. Ross	1941	Whirlaway.....	Warren Wrigg
1920	Gallant Fox.....	William Woodward	1943	Count Fleet.....	Mrs. John H. Ho
1935	Omaha.....	William Woodward	1946	Assault.....	Robert J. Kiebo
1937	War Admiral.....	Samuel D. Riddle	1948	Citation.....	Warren Wrigg

Pimlico; 3-year-olds; 1½ miles.

* Race run in two divisions in 1918.

AMERICAN DERBY

Washington Park; 3-year-olds; 1½ miles.

Washington Park; 5-year-olds; 1½ miles.					
Winner	Year	Winner	Year	Winner	Year
Desty	1901	Robert Waddell	1933	Mr. Khayyam	1948
Ante	1902	Wyeth	1934	Cavalcade	1949
er Cloud	1903	The Picket	1935	Black Helen	1950
A. Todd	1904	Highball	1937	Dawn Play	1951
eror of Norfolk	1916	Dodge	1940	Mioland	1952
kane	1926	Boot to Boot	1941	Whirlaway	1953
te Bob	1927	Hydromel	1942	Alsab	1954
thmeath	1928	Toro	1943	Askmenow	1955
sbad	1929	Windy City	1944	By Jimminy	1956
ndless	1930	Reveille Boy	1945	Fighting Step	1957
el S'ta A'ta	1931	Mate	1946	Eternal Reward	1958
Coat	1932	Gusto	1947	Fervent	1959
ay Lucas					Dunce

by which a horse is known in
as explained by John I. Day of the
bred Racing Associations: A foal
ing horse of either sex and while
ed is known as a *suckling*. When
d from his *dam*, or maternal pa-
is a *weanling* until Jan. 1 fol-

lowing his birth, when he becomes a yearling. He may be a colt, if male, and remain so (unless he becomes a gelding, or unsexed) until he is 5 years old; or, if female, a filly until 5. From 5 on, they are horses or mares and when they become parents, sires or dams.

ARLINGTON CLASSIC

Arlington Park; 3-year-olds; 1 mile.

Year	Winner	Year	Winner	Year	Winner	Year	Winner
1929	Blue Larkspur	1937	Flying Scot	1945	Pot o' Luck	1953	Native Dancer
1930	Gallant Fox	1938	Nedayr	1946	The Dude	1954	Errard King
1931	Mate	1939	Challedon	1947	But Why Not	1955	Nashua
1932	Gusto	1940	Sirocco	1948	Papa Redbird	1956	Swoon's Son
1933	Inlander	1941	Attention	1949	Ponder	1957	Clem
1934	Cavalcade	1942	Shut Out	1950	Greek Song	1958	A Dragon Killer
1935	Omaha	1943	Slide Rule	1951	Hall of Fame	1959	Dunce
1936	Granville	1944	Twilight Tear	1952	Mark-Ye-Well		

ARLINGTON FUTURITY

Arlington Park; 2-year-olds; 3/4 mile.

Year	Winner	Year	Winner	Year	Winner	Year	Winner
1927	Misstep	1937*	Tiger	1944	Free for All	1952	Mr. Good
1928	Double Heart		Teddy's Comet	1945	Spy Song	1953	Hasty Road
1932	Ladysman	1938	Thingumabob	1946	Cosmic Bomb	1954	Royal Note
1933	Far Star	1939	Andy K	1947	Piet	1955	Swoon's Son
1934	Toro Nancy	1940	Swain	1948	Mr. Busher	1956	Greek Game
1935	Grand Slam	1941	Sun Again	1949	Wisconsin Boy	1957	Leather Button
1936	Case Ace	1942	Occupation	1950	To Market	1958	Restless Wing
		1943	Jezrahel	1951	Hill Gail	1959	T. V. Lark
							* Dead heat.

EPSOM DERBY

Epsom Downs, England; 3-year-olds; 1 mile, 885 yards.

Year	Winner	Year	Winner	Year	Winner	Year	Winner
1780	Diomed	1822	Moses	1864	Blair Athol	1905	Cicero
1781	Y. Eclipse	1823	Emilius	1865	Gladiator	1906	Spearmint
1782	Assassin	1824	Cedric	1866	Lord Lyon	1907	Orbyt
1783	Saltram	1825	Middleton	1867	Hermit	1908	Signorinetta
1784	Sergeant	1826	Lap Dog	1868	Blue Gown	1909	Minoru
1785	Aimwell	1827	Mameluke	1869	Pretender	1910	Lemberg
1786	Noble	1828	Cadland	1870	Kingcraft	1911	Sunstar
1787	Sir P. Teazle	1829	Frederick	1871	Favonius	1912	Tagalie
1788	Sir Thomas	1830	Priam	1872	Cremorne	1913	Aboyeur
1789	Skyscraper	1831	Spaniel	1873	Doncaster	1914	Durbar II†
1790	Rhadamanthus	1832	St. Giles	1874	Geo. Frederick	1915	Pommern
1791	Eager	1833	Dangerous	1875	Calopin	1916	Fifinella
1792	John Bull	1834	Plenipotentiary	1876	Kisber	1917	Gay Crusader
1793	Waxy	1835	Mundig	1877	Silbio	1918	Gainsborough
1794	Daedalus	1836	Bay Middleton	1878	Sefton	1919	Grand Parade
1795	Spread Eagle	1837	Phosphorus	1879	Sir Bevvs	1920	Spion Kop
1796	Didelot	1838	Amato	1880	Bend Or	1921	Humorist
1797	Colt by Fidget	1839	Bloomsbury	1881	Iroquoist	1922	Captain Cuttle
1798	Sir Harry	1840	Little Wonder	1882	Shotover	1923	Papyrus
1799	Archduke	1841	Coronation	1883	St. Blaise	1924	Sansovino
1800	Champion	1842	Attila	1884*	St. Gatien	1925	Manna
1801	Eleanor	1843	Cotherstone		Harvester	1926	Coronach
1802	Tyrant	1844	Orlando	1885	Melton	1927	Call Boy
1803	Ditto	1845	Merry Monarch	1886	Ormonde	1928	Felstead
1804	Hannibal	1846	Pyrrhus the First	1887	Mer. Hampton	1929	Trigo
1805	Card. Beaufort	1847	Cossack	1888	Ayrshire	1930	Blenheim
1806	Paris	1848	Surplice	1889	Donovan	1931	Cameronian
1807	Election	1849	T. Flying Dutchman	1890	Sanfoin	1932	April the Fifth
1808	Pan	1850	Voltigeur	1891	Common	1933	Hyperion
1809	Pope	1851	Teddington	1892	Sir Hugo	1934	Windsor Lad
1810	Whalebone	1852	Dan. O'Rourke	1893	Isinglass	1935	Bahram
1811	Phantom	1853	W. Australian	1894	Ladas	1936	Mahmoud
1812	Octavius	1854	Andover	1895	Sir Visto	1937	Mid-Day Sun
1813	Smolensko	1855	Wild Dayrell	1896	Persimmon	1938	Bois Roussel
1814	Blucher	1856	Ellinton	1897	Galtee More	1939	Blue Peter
1815	Whisker	1857	Blink Bonny	1898	Jeddah	1940	Pont l'Eveque
1816	Prince Leopold	1858	Beadsman	1899	Flying Fox	1941	Owen Tudor
1817	Azor	1859	Musjid	1900	Diamond Jubilee	1942	Watling Street
1818	Sam	1860	Thormanby	1901	Volodyovskit	1943	Straight Lead
1819	Tiresias	1861	Kettledrum	1902	Ard Patrick	1944	Ocean Swell
1820	Sailor	1862	Caractacus	1903	Rock Sand	1945	Dante
1821	Gustavus	1863	Macaroni	1904	St. Amant	1946	Airborne

Epsom Derby (Cont.)

Pearl Diver	1951 Arctic Prince	1955 Phil Drake	1958 Hard Ridden
My Love	1952 Tulyar	1956 Lavadin	1959 Parthia
Limbus	1953 Pinza	1957 Crepello	
Alcador	1954 Never Say Diet		

* Dead heat. † American bred or owned.

FUTURITY STAKES

Aqueduct; 2-year-olds; 6½ furlongs.

Winner	Year	Winner	Year	Winner	Year	Winner
Proctor Knott	1906	Electioneer	1925	Pompey	1942	Occupation
haos	1907	Colin	1926	Scapa Flow	1943	Occupy
otomac	1908	Maskette	1927	Anita Peabody	1944	Pavot
is Highness	1909	Sweep	1928	High Strung	1945	Star Pilot
orello	1910	Novelty	1929	Whichone	1946	First Flight
omino	1913	Pennant	1930	Jamestown	1947	Citation
he Butterflies	1914	Trojan	1931	Top Flight	1948	Blue Peter
equital	1915	Thunderer	1932	Kerry Patch	1949	Guillotine
gden	1916	Campfire	1933	Singing Wood	1950	Battlefield
Alouette	1917	Papp	1934	Chance Sun	1951	Tom Fool
artimas	1918	Dunboyne	1935	Tintagel	1952	Native Dancer
harcornac	1919	Man o' War	1936	Pompoon	1953	Porterhouse
illyhoo Bay	1920	Step Lightly	1937	Menow	1954	Nashua
inkee	1921	Bunting	1938	Porter's Mite	1955	Nail
ivable	1922	Sally's Alley	1939	Bimelech	1956	Bold Ruler
amburg Belle	1923	St. James	1940	Our Boots	1957	Jester
tful	1924	Mother Goose	1941	Some Chance	1958	Intentionally
mondale					1959	Weatherwise

GRAND NATIONAL STEEPLECHASE

Liverpool, England; 6-year-olds and over; 4 miles, 856 yards (Aintree Course).

Winner	Year	Winner	Year	Winner	Year	Winner
attery	1869	The Colonel	1898	Drogheda	1927	Sprig
erry	1870	The Colonel	1899	Manifesto	1928	Tipperary Tim
arity	1871	The Lamb	1900	Ambush II	1929	Gegalach
glad	1872	Casse Tete	1901	Grudon	1930	Shaun Goilin
nguard	1873	Disturbance	1902	Shannon Lass	1931	Grakle
neer	1874	Reugny	1903	Drumcree	1932	Forbra
re All	1875	Pathfinder	1904	Moifaa	1933	Kellsboro Jack†
neer	1876	Regal	1905	Kirkland	1934	Golden Miller
thwe	1877	Austerlitz	1906	Ascetic's Silver	1935	Reynoldstown
andler	1878	Shifnal	1907	Eremon	1936	Reynoldstown
er Simple	1879	The Liberator	1908	Rubio†	1937	Royal Mail
el Kader	1880	Empress	1909	Lutteur III	1938	Battleship†
el Kader	1881	Woodbrook	1910	Jenkinstown	1939	Workman
s Mowbray	1882	Seaman	1911	Glenside	1940	Bogskar
er Simple	1883	Zoedone	1912	Jerry M	1946	Lovely Cottage
rtson	1884	Voluptuary	1913	Covertcoat	1947	Caughoo
nderer	1885	Roquefort	1914	Sunloch	1948	Sheila's Cottage
etrader	1886	Old Joe	1915	Ally Sloper	1949	Russian Hero
grant	1887	Gamecock	1916*	Bermouth	1950	Freebooter
le Charley	1888	Playfair	1917*	Ballymacad	1951	Nickel Coin
Caste	1889	Frigate	1918*	Poethlyn	1952	Teal
tis	1890	Ilex	1919*	Poethlyn	1953	Early Mist
ousy	1891	Come Away	1920	Troytown	1954	Royal Tan
tsman	1892	Father O'Flynn	1921	Shaun Spadah	1955	Quare Times
lem	1893	Cloister	1922	Music Hall	1956	E. S. B.
lematic	1894	Why Not	1923	Sgt. Murphy†	1957	Sundew
biade	1895	W. M. f. Borneo	1924	Master Rob't	1958	Mr. What
mander	1896	The Soarer	1925	Double Chance	1959	Oxo
olvin	1897	Manifesto	1926	Jack Hornet†		
Lamb						

* Substitute race.
† American bred or owned.

HOLLYWOOD GOLD CUP

Hollywood Park; 3-year-olds and over; 1¼ miles.

Winner, age	Year	Winner, age	Year	Winner, age	Year	Winner, age
oisicuit (5)	1945	Challenge Me (4)	1950	Noor (5)	1955	Rejected (5)
ak II (4)	1946	Triplecat (5)	1951	Citation (6)	1956	Swaps (4)
ledon (4)	1947	Cover Up (4)	1952	Two Lea (6)	1957	Round Table (3)
Pebble (5)	1948	Shannon II (7)	1953	Royal Serenade (5)	1958	Gallant Man (4)
py Issue (4)	1949	Solidarity (4)	1954	Correspondent (4)	1959	Hillsdale (4)

SANTA ANITA DERBY**Santa Anita Park; 3-year-olds; 1½ miles.**

Year	Winner	Year	Winner	Year	Winner	Year	Winner
1935	Gille	1941	Porter's Cap	1950	Your Host	1955	Swaps
1936	He Did	1945	Bymeabond	1951	Rough'n Tumble	1956	Terrang
1937	Fairy Hill	1946	Knockdown	1952	Hill Gail	1957	Sir William
1938	Stagehand	1947	On Trust	1953	Chanlea	1958	Silky Sullivan
1939	Ciencia	1948	Salmagundi	1954	Determine	1959	Silver Spoon
1940	Sweepida	1949	Old Rockport				

SANTA ANITA HANDICAP**Santa Anita Park; 3-year-olds and over; 1½ miles.**

Year	Winner, age	Year	Winner	Year	Winner	Year	Winner
1935	Azucar (7)	1939	Kayak II (4)	1948	Talon (6)	1954	Rejected (4)
1936	Top Row (5)	1940	Seabiscuit (7)	1949	Vulcan's Forge (4)	1955	Poona II (4)
1937	Rosemont (5)	1941	Bay View (4)	1950	Noor (5)	1956	Bobby Brocato (5)
1938	Stagehand (3)	1945	Thumbs Up (6)	1951	Moonrush (5)	1957	Corn Husker (4)
		1946	War Knight (6)	1952	Miche (7)	1958	Round Table (4)
		1947	Olhaverly (8)	1953	Mark-Ye-Well (4)	1959	Terrang (6)

TRAVERS STAKES**Saratoga; 3-year-olds; 1¼ miles.**

Year	Winner	Year	Winner	Year	Winner	Year	Winner
1864	Kentucky	1887	Carey	1916	Spur	1938	Thanksgiving
1865	Maiden	1888	Sir Dixon	1917	Omar Khayyam	1939	Eight Thirty
1866	Merrill	1889	Long Dance	1918	Sun Briar	1940	Fenelon
1867	Ruthless	1890	Sir John	1919	Hannibal	1941	Whirlaway
1868	The Banshee	1891	Vallera	1920	Man o' War	1942	Shut Out
1869	Glenelg	1892	Azra	1921	Sporting Blood	1943	Eurasian
1870	Kingfisher	1893	Stowaway	1922	Little Chief	1944	By Jimminy
1871	Harry Bassett	1894	Henry of Navarre	1923	Wilderness	1945	Adonis
1872	Joe Daniels	1895	Liza	1924	Sun Flag	1946	Natchez
1873	Tom Bowling	1897	Rensselaer	1925	Dangerous	1947	Young Peter
1874	Attila	1901	Blues	1926	Mars	1948	Ace Admiral
1875	D'Artagnan	1902	Hermis	1927	Brown Bud	1949	Arise
1876	Sultana	1903	Ada Nay	1928	Petee-Wrack	1950	Lights Up
1877	Baden Baden	1904	Broomstick	1929	Beacon Hill	1951	Battlefield
1878	Duke of Magenta	1905	Dandelion	1930	Jim Dandy	1952	One Count
1879	Falsetto	1906	Gallivant	1931	Twenty Grand	1953	Native Dancer
1880	Grenada	1907	Frank Gill	1932	War Hero	1954	Fisherman
1881	Hindoo	1908	Dorante	1933	Inlander	1955	Thinking Cap
1882	Carley B	1909	Hilarious	1934	Observant	1956	Oh Johnny
1883	Barnes	1910	Dalmatian	1935	Gold Foam	1957	Gallant Man
1884	Rataplan	1913	Rock View	1936	Granville	1958	Piano Jim
1885	Bersan	1914	Roamer	1937	Burning Star	1959	Sword Dancer
1886	Inspector B	1915	Lady Rotha				

WASHINGTON, D. C., INTERNATIONAL**Laurel; 3-year-olds and over; about 1½ miles.**

1952	Wilwyn (4)	1954	Fisherman (3)	1956	Master Boing (3)	1958	Sailor's Guide (6)
1953	Worden II (4)	1955	El Chama (4)	1957	Mahan (6)	1959	Bald Eagle (4)

WASHINGTON PARK FUTURITY**Washington Park; 2-year-olds; 3/4 mile.**

Year	Winner	Year	Winner	Year	Winner	Year	Winner
1937	Tiger	1945	Revoked	1950	To Market	1955	Swoon's Son
1940	Porter's Cap	1946	Education	1951	Oh Leo	1956	Greek Game
1941	Alsab	1947	Bewitch	1952	Mr. Paradise	1957	Jewel's Reward
1942	Occupation	1948	Model Cadet	1953	Hasty Road	1958	Restless Wing
1943	Occupy	1949	Curtice	1954	Georgian	1959	Venetian Way
1944	Free for All						

WIDENER HANDICAP**Hialeah Park; 3-year-olds and over; 1¼ miles.**

Year	Winner, age	Year	Winner	Year	Winner, age	Year	Winner, age
1936	Mantagna (4)	1942	The Rhymr (4)	1950	Royal Governor (6)	1955	Hasty Road (4)
1937	Columbiana (4)	1944	Four Freedoms (4)	1951	Sunglow (4)	1956	Nashua (4)
1938	War Admiral (4)	1946	Armed (5)	1952	Spartan Valor (4)	1957	Bardstown (5)
1939	Bull Lea (4)	1947	Armed (6)	1953	Oil Capitol (6)	1958	Oligarchy (4)
1940	Many Stings (5)	1948	El Mono (4)	1954	Landlocked (4)	1959	Bardstown (7)
1941	Big Pebble (5)	1949	Coaltown (4)				

Racing

LEADING JOCKEYS SINCE 1936

Jockey	Mounts	Winners	Unplaced	Pct.
B. James	1,106	245	505	.22
J. Adams	1,265	260	642	.21
J. Longden	1,150	236	575	.21
D. Meade	1,284	255	628	.20
E. Dew	1,377	287	709	.21
D. Meade	1,164	210	611	.18
J. Adams	1,120	245	540	.22
J. Adams	1,069	228	511	.21
T. Atkinson	1,539	287	808	.19
J. D. Jessop	1,085	290	445	.27
T. Atkinson	1,377	233	758	.17
J. Longden	1,327	316	566	.24
J. Longden	1,197	319	494	.27
G. Glisson	1,347	270	679	.20
W. Shoemaker	1,640	388	756	.24
J. Culmone	1,676	388	787	.23
C. Burr	1,162	310	585	.24
A. DeSpirito	1,482	390	633	.26
W. Shoemaker	1,683	485	686	.29
W. Shoemaker	1,251	380	508	.30
W. Hartack	1,702	417	772	.25
W. Hartack	1,387	347	604	.25
W. Hartack	1,238	341	511	.25
W. Shoemaker	1,133	300	511	.26
W. Shoemaker	1,285	347	549	.27

LEADING TRAINERS SINCE 1936

(Winners saddled)			
Name	Winners	Earnings	Year
H. Jacobs	177	155,789	1936
H. Jacobs	134	142,474	1937
H. Jacobs	109	116,609	1938
H. Jacobs	106	100,907	1939
D. Womeldorf	108	112,137	1940
H. Jacobs	123	165,964	1941
H. Jacobs	133	186,371	1942
H. Jacobs	128	210,775	1943
H. Jacobs	117	306,821	1944
S. Lipiec	127	238,361	1945
W. Molter	122	329,725	1946
W. Molter	155	833,970	1947
W. Molter	184	1,015,547	1948
W. Molter	129	696,184	1949
W. H. Bishop	129	236,131	
R. H. McDaniel	156	441,590	1950
R. H. McDaniel	164	539,204	1951
R. H. McDaniel	168	573,837	1952
R. H. McDaniel	211	751,957	1953
R. H. McDaniel	206	834,390	1954
F. H. Merrill, Jr.	154	298,794	1955
V. R. Wright	177	532,344	1956
V. R. Wright	192	527,271	1957
F. H. Merrill, Jr.	171	320,827	1958
V. R. Wright	172	534,319	1959

TOP MONEY-WINNING OWNERS

Name	Amount
Milky Way Farm Stable	206,450
Mrs. Charles S. Howard	214,559
H. Maxwell Howard	226,495
Belair Stud	284,250
Charles S. Howard	334,120
Calumet Farm	475,091
Greentree Stable	414,432
Calumet Farm	267,915
Calumet Farm	601,660
Maine Chance Farm	589,170
Calumet Farm	564,095
Calumet Farm	1,402,436
Calumet Farm	1,269,710
Calumet Farm	1,128,942
Brookmeade Stable	651,399
Greentree Stable	637,242
Calumet Farm	1,283,197
A. G. Vanderbilt	987,306
King Ranch	837,615
Hasty House Farm	832,879
Calumet Farm	1,057,383
Calumet Farm	1,150,910
Calumet Farm	946,262
Main Hoy Stable	742,081

TOP MONEY-WINNING HORSES

Horse and age	Starts	1st	Amount
Granville (3)	11	7	110,295
Seabiscuit (4)	15	11	168,580
Stagehand (3)	15	8	189,710
Challedon (3)	15	9	184,535
Bimelech (3)	7	4	110,005
Whirlaway (3)	20	13	272,386
Shut Out (3)	12	8	238,872
Count Fleet (3)	6	6	174,055
Pavot (2)	8	8	179,040
Busher (3)	13	10	273,735
Assault (3)	15	8	424,195
Armed (6)	17	11	376,325
Citation (3)	20	19	709,470
Ponder (3)	21	9	321,825
Noor (5)	12	7	346,940
Counterpoint (3)	15	7	250,525
Crafty Admiral (4)	16	9	277,225
Native Dancer (3)	10	9	513,425
Determine (3)	15	10	328,700
Nashua (3)	12	10	752,550
Needles (3)	8	4	440,850
Round Table (3)	22	15	600,285
Round Table (4)	20	14	662,780
Sword Dancer (3)	13	8	537,004

Round Table Racing's Biggest Money Winner

Round Table was retired from racing in 1959, the 5-year-old had earned \$1,085,670, the highest on record for any horse. Round Table, owned by Travis Kerr, was born in 1954 in Omaha City, had been in 66 races. In 1959, he won 43 of these starts, placed second 8 times and third 5 times. These wins which led the money-winning list for Round Table:

	Starts	1st	2d	3d	Earnings
Nashua	30	22	4	1	\$1,288,565
Citation	45	32	10	2	1,085,670
Stymie	131	35	33	28	918,485
Armed	81	41	20	10	817,475
Assault	42	18	6	7	675,470
Whirlaway	60	32	15	9	561,161
Seabiscuit	89	33	15	13	437,730
Sun Beau	74	33	12	10	376,744

WORLD RECORDS

Distance	Horse, age, weight, track and location	Date	
$\frac{1}{4}$ f.....	Big Racket, 4, 111, Hipodromo de las Americas, Mexico City, Mexico.....	February 5, 1945	1
$2\frac{1}{2}$ f.....	Pichirilo, 2, 117, Hipodromo de las Americas, Mexico City, Mexico.....	March 25, 1954	1
$\frac{3}{8}$ f.....	Atoka, 6, 105, Butte, Mont.....	September 7, 1906	1
$3\frac{1}{2}$ f.....	Joe Blair, 5, 115, Juarez, Mexico.....	February 5, 1916	1
	Deep Sun, 7, 120, Shenandoah Downs, Charlestown, W. Va.....	July 11, 1959	1
$\frac{1}{2}$ f.....	Beau Madison, 2, 120, Turf Paradise, Phoenix, Ariz.....	March 30, 1957	1
$4\frac{1}{2}$ f.....	Iron Rail, 2, 119, Gulfstream Park, Hallandale, Fla.....	April 6, 1960	1
$\frac{5}{8}$ f.....	Bettyanbull, 5, 120, Turf Paradise, Phoenix, Ariz.....	February 8, 1959	1
$5\frac{1}{2}$ f.....	Porterhouse, 6, 125, Hollywood Park, Inglewood, Calif.....	June 13, 1957	1
$5\frac{1}{4}$ f.....	Fighting Fox, 4, 126, Empire City, Yonkers, N. Y.....	July 8, 1939	1
	Doublrab, 4, 130, Empire City, Yonkers, N. Y.....	July 18, 1942	1
$\frac{3}{4}$ f.....	*Gelding by Blink-Broken Tendril, 3, 123, Brighton, England.....	August 6, 1929	1
	Dumpty Humpty, 4, 115, Golden Gate Fields, Albany, Calif.....	November 2, 1957	1
$6\frac{1}{2}$ f.....	Tyhawk, 4, 117, Turf Paradise, Phoenix, Ariz.....	February 8, 1959	1
	Golden Notes, 5, 124, Hawthorne, Cicero, Ill.....	September 19, 1959	1
	Little Tytus, 4, 116, Hawthorne, Cicero, Ill.....	September 17, 1960	1
$\frac{7}{8}$ f.....	El Drag, 4, 115, Hollywood Park, Inglewood, Calif.....	May 21, 1957	1
1 mi.....	Swaps, 4, 128, Hollywood Park, Inglewood, Calif.....	June 9, 1955	1
	Intentionally, 3, 121, Washington Park, Homewood, Ill.....	June 27, 1959	1
1 mi. 70 yd....	Mark Antony, 4, 115, Rockingham Park, Salem, N. H.....	September 6, 1958	1
$1\frac{1}{16}$ f.....	Swaps, 4, 130, Hollywood Park, Inglewood, Calif.....	June 23, 1956	1
$1\frac{1}{4}$ f.....	Bug Brush, 4, 113, Santa Anita Park, Arcadia, Calif.....	February 14, 1959	1
$1\frac{3}{16}$ f.....	Fleet Bird, 4, 123, Golden Gate Fields, Albany, Calif.....	October 24, 1953	1
$1\frac{1}{2}$ f.....	Noor, 5, 127, Golden Gate Fields, Albany, Calif.....	June 24, 1950	1
$1\frac{3}{4}$ f.....	Man o' War, 3, 126, Belmont Park, Elmont, N. Y.....	June 12, 1920	2
$1\frac{1}{2}$ f.....	The Bastard, 3, 124, Newmarket, England.....	October 18, 1929	2
1 mi. $4\frac{1}{2}$ f....	Mistucky, 9, 113, River Downs, Cincinnati, Ohio.....	June 26, 1946	2
$1\frac{1}{8}$ f.....	Swaps, 4, 130, Hollywood Park, Inglewood, Calif.....	July 25, 1956	2
1 mi. $5\frac{1}{2}$ f....	Distribute 9, 109, River Downs, Cincinnati, Ohio.....	September 7, 1940	2
$1\frac{3}{8}$ f.....	Noor, 5, 117, Santa Anita Park, Arcadia, Calif.....	March 4, 1950	2
$1\frac{7}{8}$ f.....	Pharawell, 5, 119, Gulfstream Park, Hallandale, Fla.....	April 8, 1947	3
2 f.....	Polazel, 3, 142, Salisbury, England.....	July 8, 1924	3
2 mi. 40 yd....	Winning Mark, 4, 107, Thistle Down Park, Cleveland, Ohio.....	July 20, 1940	3
2 mi. 70 yd....	Filisteo, 7, 116, Pimlico, Baltimore, Md.....	October 30, 1941	3
$2\frac{1}{16}$ f.....	Midafternoon, 4, 126, Jamaica, Jamaica, N. Y.....	November 15, 1956	3
$2\frac{1}{8}$ f.....	Ceinturion, 5, 119, Newbury, England.....	September 29, 1923	3
$2\frac{3}{16}$ f.....	Santiago, 5, 112, Narragansett Park, Pawtucket, R. I.....	September 27, 1941	3
$2\frac{1}{2}$ f.....	Dakota, 4, 116, Lingfield, England.....	May 27, 1927	3
$2\frac{3}{8}$ f.....	Wiki Jack, 4, 97, Tijuana, Mexico.....	February 8, 1925	4
$2\frac{5}{16}$ f.....	Heiress Marie, 3, 101, Cahokia Downs, East St. Louis, Ill.....	July 16, 1960	4
$2\frac{1}{2}$ f.....	Miss Grillo, 6, 118, Pimlico, Baltimore, Md.....	November 12, 1948	4
$2\frac{5}{8}$ f.....	Worthman, 5, 101, Tijuana, Mexico.....	February 22, 1925	4
$2\frac{3}{4}$ f.....	Shot Put, 4, 126, Washington Park, Homewood, Ill.....	August 14, 1940	4
$2\frac{7}{8}$ f.....	Bosh, 5, 100, Tijuana, Mexico.....	March 8, 1925	5
3 f.....	Farragut, 5, 113, Agua Caliente, Mexico.....	March 9, 1941	5
$3\frac{1}{8}$ f.....	Winning Mark, 4, 104, Washington Park, Homewood, Ill.....	August 21, 1940	6
4 f.....	Sotemia, 5, 119, Churchill Downs, Louisville, Ky.....	October 7, 1912	7
* $\frac{3}{4}$ mile course at Brighton is started on a hill and is down grade to within one-third of a mile of the			

Straight Course

$\frac{1}{4}$ f.....	Red Jones, 7, 126, Cranwood Race Course, Warrensville Heights, Ohio.....	October 21, 1958	1
$\frac{3}{8}$ f.....	King Rhymer, 2, 118, Santa Anita Park, Arcadia, Calif.....	February 27, 1947	1
$\frac{1}{2}$ f.....	Gloaming, 6, 127, Trentham, Wellington, New Zealand.....	January 12, 1921	1
$4\frac{1}{2}$ f.....	The Pimpernel, 2, 118, Belmont Park, Elmont, N. Y.....	May 17, 1951	1
	Reneged, 2, 118, Belmont Park, Elmont, N. Y.....	June 7, 1955	1
$\frac{5}{8}$ f.....	Devineress, 3, 103, Epsom Downs, Epsom, England.....	June 2, 1933	1
$5\frac{1}{2}$ f.....	Delegate, 7, 113, Belmont Park, Elmont, N. Y.....	October 10, 1951	1
$5\frac{3}{4}$ f.....	Vestment, 2, 115, Belmont Park, Elmont, N. Y.....	October 15, 1954	1
$6\frac{1}{2}$ f.....	Porter's Mite, 2, 119, Belmont Park, Elmont, N. Y.....	September 17, 1938	1
	Native Dancer, 2, 122, Belmont Park, Elmont, N. Y.....	September 27, 1952	1
$\frac{7}{8}$ f.....	First Edition, 4, 126, Hurst Park, Hampton Court, England.....	May 25, 1926	1
1 f.....	Mopsus, 3, 105, Brighton, England.....	June 22, 1939	1
$1\frac{1}{4}$ f.....	Banquet, 3, 108, Monmouth Park, N. J.....	July 17, 1890	2

Record Betting Day at a Race Track

The greatest amount of money ever wagered on a single horse racing program was bet on the nine-race card presented at Aqueduct on Memorial Day in 1960. A crowd of 70,992 fed \$5,560,628 into mutuel machines. The previous record was \$5,016,745 at Belmont Park on Sept. 1945, bet by 49,614 persons.

HARNESS RACING

EVER WENDELL HOLMES, the famous Autocrat of the Breakfast Table, wrote the running horse was a gambling toy the trotting horse was useful and, furthermore, "horse-racing is not a republican institution; horse-trotting is." Oliver Wendell Holmes was a born and bred New Yorker and New England was the nurse of the harness racing sport in America. Saddle and trotters were matters of local pride and prejudice in Colonial New England, and, shortly after the Revolution, the Thoroughbred and Justin Morgan strains produced many winners in harness racing "along the turnpikes of New England, Connecticut, Rhode Island, Massachusetts, Vermont, and New Hampshire. There was English thoroughbred blood in the Messenger and Justin Morgan and, many years later, it was blended in Rysdyk's

Hambletonian, foaled in 1849. Hambletonian was not particularly fast under harness but his descendants have had almost a monopoly of prizes, titles, and records in the harness racing game. Hambletonian was purchased as a foal with its dam for a total of \$124 by William Rysdyk of Goshen, N. Y., and made a modest fortune for the purchaser.

Trotters and pacers often were raced under saddle in the old days and, in fact, the custom still survives in some places in Europe. Dexter, the great trotter that lowered the mile record from 2:19¾ to 2:17¼ in 1867, was said to handle just as well under saddle as when pulling a sulky. But as sulkies were lightened in weight and improved in design, trotting under saddle became less common and finally faded out in this country.

WORLD RECORDS

Established in a Race or Against Time at One Mile

Source: Larry Evans, Public Relations Director, United States Trotting Association.

TROTTING ON MILE TRACK

Record	Holder	Driver	Where Made	Year
1:55 1/4	Greyhound	Sep Palin	Lexington, Ky.	1938
2:15 1/5	Rilda Rose	Ike Bailey	Lexington, Ky.	1955
1:59 3/4	Yankee Lass	Frank Ervin	Lexington, Ky.	1957
1:58	Titan Hanover	Harry Pownall	Du Quoin, Ill.	1945
1:58	Emily's Pride	Flick Nipe	Lexington, Ky.	1958
1:58	Yankee Lass	Frank Ervin	Lexington, Ky.	1958
1:58	Expresson	Frank Ervin	Lexington, Ky.	1959
1:57 1/4(r)	Greyhound	Sep Palin	Springfield, Ill.	1936
1:57 1/4	Spencer Scott	Fred Egan	Lexington, Ky.	1941

TROTTING ON HALF-MILE TRACK

1:59 3/4	Greyhound	Sep Palin	Goshen, N. Y.	1937
2:21 1/2	U. Forbes	H. C. Moody	Louisville, Ky.	1913
2:03 1/2(r)	Titan Hanover	Harry Pownall	Delaware, Ohio	1944
2:01 2/5(r)	Galophone	Wayne Smart	Delaware, Ohio	1955
2:01 2/5	Hickory Smoke	John Simpson	Delaware, Ohio	1957
2:00 1/5(r)	Galophone	W. Robert Walker	Westbury, N. Y.	1956

PACING ON MILE TRACK

1:54 3/5	Adios Butler	Paige West	Lexington, Ky.	1960
2:14 3/4	Royal Lady 2nd	O. M. Powell	Indianapolis	1939
1:57(r)	Bullet Hanover	John Simpson	Indianapolis	1959
1:55 3/5	Bullet Hanover	John Simpson	Lexington, Ky.	1960
1:54 3/5	Adios Butler	Paige West	Lexington, Ky.	1960

PACING ON HALF-MILE TRACK

1:57 4/5(r)	Bye Bye Bird	Clint Hodgins	Westbury, N. Y.	1959
2:15 2/5	F. E. Scott	E. Cunningham	Montreal, Que.	1959
2:00 4/5(r)	Muncy Hanover	Earle Avery	Delaware, Ohio	1959
1:58 3/5(r)	Muncy Hanover	Earle Avery	Delaware, Ohio	1960
1:58 3/5(r)	Bullet Handover	John Simpson	Delaware, Ohio	1960
1:57 4/5(r)	Bye Bye Bird	Clint Hodgins	Westbury, N. Y.	1959

rd made in race.

Betting Record for Pari-Mutuel Harness Racing

ds for betting and for attendance at the pari-mutuel harness racing track were set at Roosevelt Raceway, Westbury, N. Y., on Aug. 20, 1960. A crowd of over 100,000 gathered \$2,730,113 on the nine-race

program that evening. The previous betting record of \$2,692,585 had been set at the same track on Nov. 30, 1959. The previous attendance record was 50,336, set at Roosevelt Raceway in 1957.

HISTORY OF TRADITIONAL HARNESS RACING STAKES

The Hambletonian

Three-year-old trotters. One mile. Raced at Syracuse, N. Y., 1926, 1928; at Lexington, Ky., 1927, 1928; at Goshen, N. Y., 1930-42, 1944-56; at Yonkers, N. Y., 1943; at Du Quoin, Ill., since 1957.

Year	Winner	Driver	Best time	Total p
1926	Guy McKinney	Nat Ray	2:04 3/4	\$ 73.45
1927	Isola's Worthy	Marvin Childs	2:03 3/4	54.19
1928	Spencer	W. H. Leese	2:02 1/2	66.22
1929	Walter Dear	Walter Cox	2:02 3/4	60.30
1930	Hanover's Bertha	Tom Berry	2:03	56.8
1931	Calumet Butler	Dick McMahon	2:03 1/4	50.5
1932	The Marchioness	Will Caton	(a)2:01 1/4	49.4
1933	Mary Reynolds	Ben White	2:03 3/4	40.45
1934	Lord Jim	H. M. Parshall	2:02 3/4	25.84
1935	Greyhound	Sep Palin	2:02 1/4	33.22
1936	Rosalind	Ben White	2:01 3/4	35.61
1937	Shirley Hanover	Henry Thomas	2:01 1/2	37.9
1938	McLin Hanover	Henry Thomas	2:02 1/4	37.96
1939	Peter Astra	H. M. Parshall	2:04 1/4	40.50
1940	Spencer Scott	Fred Egan	2:02	43.65
1941	Bill Gallon	Lee Smith	2:05	38.72
1942	The Ambassador	Ben White	2:04	38.95
1943	Volo Song	Ben White	(b)2:02 1/2	42.79
1944	Yankee Maid	Henry Thomas	2:04	33.57
1945	Titan Hanover	Harry Pownall	2:04	50.9
1946	Chestertown	Tom Berry	2:02 1/2	50.99
1947	Hoot Mon	Sep Palin	2:00	46.26
1948	Demon Hanover	Harrison Hoyt	2:02	59.94
1949	Miss Tilly	Fred Egan	2:01 2/5	69.79
1950	Lusty Song	Del Miller	2:02	75.20
1951	Mainliner	Guy Crippen	2:02 3/5	95.26
1952	Sharp Note	Bi Shively	2:02 3/5	87.63
1953	Helicopter	Harry Harvey	(c)2:01 3/5	117.11
1954	Newport Dream	Del Cameron	2:02 4/5	105.83
1955	Scott Frost	Joe O'Brien	2:00 3/5	86.85
1956	The Intruder	Ned Bower	2:01 2/5	100.6
1957	Hickory Smoke	John Simpson	2:01	111.12
1958	Emily's Pride	Flick Nipe	1:59 4/5	106.71
1959	Diller Hanover	Frank Ervin	2:01 1/5	125.28

(a) By Hollywood Dennis. (b) By Worthy Boy and by Volo Song. (c) By Morse Hanover.

Little Brown Jug

Three-year-old pacers. Raced at Delaware County Fair Grounds, Delaware, Ohio.

Year	Winner	Driver	Best time	Total P
1946	Ensign Hanover	Wayne Smart	(a)2:02 3/4	\$35.35
1947	Forbes Chief	Del Cameron	2:05	38.20
1948	Knight Dream	Frank Safford	2:07 1/5	47.52
1949	Good Time	Frank Ervin	2:03 2/5	58.28
1950	Dudley Hanover	Del Miller	2:02 3/5	56.52
1951	Tar Heel	Del Cameron	2:00	66.28
1952	Meadow Rice	Wayne Smart	2:01 3/5	60.4
1953	Keystoner	Frank Ervin	(b)2:02 3/5	54.97
1954	Adios Harry	Morris MacDonald	(c)2:01 2/5	69.33
1955	Quick Chief	Bill Haughton	(d)2:00	66.60
1956	Noble Adios	Jeha Simpson	2:00 4/5	52.66
1957	Torpid	John Simpson	2:00 4/5	73.53
1958	Shadow Wave	Joe O'Brien	2:01	65.25
1959	Adios Butler	Clint Hodgins	1:59 2/5	76.56

(a) By Royal Chief. (b) By Newport Chief. (c) By Phantom Lady. (d) By Dottie's Pick.

HARNESS RACING RECORDS FOR THE MILE

TROTTERS

Time	Trotter, age, driver	Year	Time	Pacer, age, driver	Y
1:58½	Lou Dillon, 5, Millard Sanders	1903	1:59	Dan Patch, 7, M. E. McHenry	1
1:58	Uhlman, 8, Charles Tanner	1912	1:56¾	Dan Patch, 7, M. E. McHenry	1
1:58	Peter Manning, 5, T. W. Murphy	1921	1:56	Dan Patch, 8, H. C. Hersey	1
1:57¾	Peter Manning, 5, T. W. Murphy	1921	1:55¾*	Dan Patch, 8, H. C. Hersey	1
1:57	Peter Manning, 6, T. W. Murphy	1922	1:55	Billy Direct, 4, Vic Fleming	1
1:56¾	Peter Manning, 6, T. W. Murphy	1922	1:55	Adios Harry, 4, Luther Lyons	1
1:56¾	Greyhound, 5, Sep Palin	1937	1:54¾	Adios Butler, 4, Paige West	1
1:56	Greyhound, 5, Sep Palin	1937			
1:55¾	Greyhound, 6, Sep Palin	1938			

* With windshield.

SWIMMING

THERE IS THE ancient tale of Leander of Abydos swimming the Hellespont to call on Helen of Sestos, but no kept the time on his trips. However, Byron swam one leg of the old Leander course, Sestos to Abydos, on May 3, in 1 hour 10 minutes. The famous poet was a noted swimmer and in an endurance trial at Venice, was in the water for 4 hours 10 minutes. Discontinuous swimming was the early type of common. Captain Matthew Webb achieved the feat by being the first to swim the English Channel—Dover to Calais—in August, 1875, in 21 hours 45 minutes. Many other swimmers and women, have conquered the

Channel since that time. Gertrude Ederle, of New York City, was the first woman to accomplish the feat. Miss Ederle swam the Channel Aug. 6, 1926, in 14 hours 34 minutes, breaking the existing record at that time. Since then the record has been lowered by a number of men and women.

Regular competition at short as well as long distances and indoor as well as outdoor came with the development of such organizations as the Amateur Athletic Union and the building of indoor and outdoor swimming pools. Swimming has been on the Olympic program since the start of the modern Olympic Games at Athens in 1896.

WORLD RECORDS

To move to end confusion over world records, the International Amateur Swimming Federation (F.I.N.A.) began in 1957 to recognize only those marks which are made in water of 55-yard pools. As of May 1, 1957, all previously recognized records established in pools of other lengths were wiped out. Some of these were replaced when F.I.N.A. established new records later in 1957 and again in following years. The record list which was approved by the federation on Sept. 3, 1960, upon the conclusion of the Olympic swimming program in Rome.

Men

FREE STYLE

Distance	Record	Holder	Country	Where Made	Date
100 yds.	0:54.6	John Devitt	Australia	Brisbane	Jan. 28, 1957
200 yds.	0:55.1	John Devitt	Australia	Sydney	Feb. 7, 1959
400 yds.	2:01.5	Tsuyoshi Yamanaka	Japan	Osaka, Japan	July 26, 1959
800 yds.	2:01.6	Jon Konrads	Australia	Sydney	Feb. 20, 1960
1,600 yds.	4:15.9	Jon Konrads	Australia	Sydney	Feb. 23, 1960
3,200 yds.	4:15.9	Jon Konrads	Australia	Sydney	Feb. 23, 1960
4,800 yds.	8:59.6	Jon Konrads	Australia	Sydney	Jan. 10, 1959
6,400 yds.	8:59.6	Jon Konrads	Australia	Sydney	Jan. 10, 1959
8,000 yds.	17:11.0	Jon Konrads	Australia	Sydney	Feb. 27, 1960
9,600 yds.	17:11.0	Jon Konrads	Australia	Sydney	Feb. 27, 1960

BREASTSTROKE

100 yds.	1:11.5	W. Minashkin	U.S.S.R.	Leipzig, Germany	Sept. 15, 1957
200 yds.	1:12.4	Terry Gathercole	Australia	Townsville, Australia	June 28, 1958
400 yds.	2:36.5	Terry Gathercole	Australia	Townsville, Australia	June 28, 1958
800 yds.	2:36.5	Terry Gathercole	Australia	Townsville, Australia	June 28, 1958

BUTTERFLY

100 yds.	0:58.7	Lance Larson	United States	Toledo	July 24, 1960
200 yds.	1:00.5	Lance Larson	United States	Culver City, Calif.	July 8, 1960
400 yds.	2:12.8	Mike Troy	United States	Rome	Sept. 2, 1960
800 yds.	2:17.5	Neville Hayes	Australia	Townsville, Australia	Aug. 6, 1960

BACKSTROKE

100 yds.	1:01.5	John Monckton	Australia	Melbourne	Feb. 15, 1958
200 yds.	1:01.5	John Monckton	Australia	Melbourne	Feb. 15, 1958
400 yds.	2:16.0	Tom Stock	United States	Toledo	July 24, 1960
800 yds.	2:18.4	John Monckton	Australia	Melbourne	Feb. 18, 1958

INDIVIDUAL MEDLEY

100 yds.	5:04.5	Dennis Rounsaville	United States	Toledo	July 24, 1960
200 yds.	5:08.8	Ian Black	Great Britain	Cardiff	June 6, 1959

FREE STYLE RELAYS

Distance	Record	Holder	Country	Where Made	Date
400 meters	3:44.4	National Team (Elton Follett, Lance Larson, Jeff Farrell, Joe Alkire)	United States	Tokyo	July 21, 1936
440 yards	3:45.7	National Team (Geoffrey Shipton, John Devitt, Jon Henricks, Dave Dickson)	Australia	Townsville, Australia	Aug. 2, 1936
800 meters	8:10.2	National Team (George Harrison, Dick Blick, Mike Troy, Jeff Farrell)	United States	Rome	Sept. 1, 1936
880 yards	8:16.6	National Team (Jon Henricks, Dave Dickson, Jon Konrads, Murray Rose)	Australia	Townsville, Australia	Aug. 6, 1936

MEDLEY RELAYS

(Back, Breast, Butterfly, Free Style)

400 meters	4:05.4	National Team (Frank McKinney, Paul Hait, Lance Larson, Jeff Farrell)	United States	Rome	Sept. 1, 1936
440 yards	4:14.2	National Team (John Monckton, Terry Gathercole, Brian Wilkinson, John Devitt)	Australia	Cardiff	July 25, 1936

Women

FREE STYLE

100 meters	1:00.2	Dawn Fraser	Australia	Sydney	Feb. 23, 1936
110 yards	1:00.2	Dawn Fraser	Australia	Sydney	Feb. 23, 1936
200 meters	2:11.6	Dawn Fraser	Australia	Sydney	Feb. 27, 1936
220 yards	2:11.6	Dawn Fraser	Australia	Sydney	Feb. 27, 1936
400 meters	4:44.5	Chris von Saltza	United States	Detroit	Aug. 5, 1936
440 yards	4:45.4	Ilsa Konrads	Australia	Sydney	Jan. 9, 1937
800 meters	9:55.6	Jane Cederqvist	Sweden	Uppsala, Sweden	Aug. 17, 1936
880 yards	10:11.4	Ilsa Konrads	Australia	Hobart, Australia	Feb. 19, 1937
1,500 meters	19:25.7	Ilsa Konrads	Australia	Sydney	Jan. 14, 1937
1,650 yards	19:25.7	Ilsa Konrads	Australia	Sydney	Jan. 14, 1937

BREASTSTROKE

100 meters	1:19.0	U. Kuper	Germany	Leipzig, Germany	July 14, 1936
110 yards	1:21.2	Rosemary Lassig	Australia	Bundaberg, Australia	Jan. 7, 1937
200 meters	2:49.5	Anita Lonsbrough	Great Britain	Rome	Aug. 27, 1936
220 yards	2:52.5	Ada den Haan	Netherlands	Blackpool	May 18, 1936

BUTTERFLY

100 meters	1:09.1	Nancy Ramey	United States	Chicago	Sept. 2, 1936
110 yards	1:10.8	Dawn Fraser	Australia	Sydney	Feb. 23, 1936
200 meters	2:34.4	Marianne Heemskirk	Netherlands	Leipzig, Germany	June 12, 1936
220 yards	2:37.0	Becky Collins	United States	Redding, Calif.	July 19, 1936

BACKSTROKE

100 meters	1:09.2	Lynn Burke	United States	Detroit	Aug. 5, 1936
110 yards	1:11.9	Judy Grinham	Great Britain	Cardiff	July 23, 1936
200 meters	2:33.3	Satoko Tanaka	Japan	Tokyo	July 23, 1936
220 yards	2:37.2	Marilyn Wilson	Australia	Townsville, Australia	Aug. 4, 1936

INDIVIDUAL MEDLEY

400 meters	5:36.5	Donna de Varona	United States	Indianapolis	July 15, 1936
440 yards	5:40.2	Sylvia Ruuska	United States	Redding, Calif.	July 17, 1936

FREE STYLE RELAYS

400 meters	4:08.9	National Team (Joan Spillane, Shirley Stobs, Carolyn Wood, Chris von Saltza)	United States	Rome	Sept. 3, 1936
440 yards	4:16.2	National Team (Dawn Fraser, Alva Colquhoun, Ilsa Konrads, Lorraine Crapp)	Australia	Townsville, Australia	Aug. 6, 1936

MEDLEY RELAYS

(Back, Breast, Butterfly, Free Style)

400 meters	4:41.1	National Team (Lynn Burke, Patty Kempner, Carolyn Schuler, Chris von Saltza)	United States	Rome	Sept. 2, 1936
440 yards	4:50.2	National Team (Gerry Beckett, Rosemary Lassig, Janice Andrew, Dawn Fraser)	Australia	Townsville, Australia	Aug. 4, 1936

Olympic Emblem Protected by Law

Federal law forbids the use of the Olympic emblem or the words, "Olympic" and "Olympiad" for business or advertising purposes or for theatrical or athletic per-

formances to any persons, corporations, or associations other than the United States Olympic Association, its subordinate organizations, and its employees and officers.

1960 CHAMPIONS AND RECORDS

BASKETBALL

NATIONAL COLLEGIATE A.A.
CHAMPIONSHIP

(At San Francisco)

OHIO STATE (75)

	g	f	pf	p
.....	4	4	2	12
.....	5	0	1	10
.....	7	2	2	16
.....	6	3	2	15
.....	5	3	2	13
.....	2	0	1	4
.....	2	0	1	4
.....	0	0	0	0
.....	0	0	1	0
.....	0	0	0	0
.....	0	1	1	1
.....	0	0	0	0

Totals.....31 13 13 75

Half-time score—Ohio State 37, California 19.

Free throws missed—Havlicek, Roberts, Siegfried 3, n, McClintock, Stafford, Averbuck.

CALIFORNIA (55)

	g	f	pf	p
Gillis.....	4	0	1	8
McClintock..	4	2	3	10
Imhoff.....	3	2	2	8
Wendell.....	0	4	2	4
Shultz.....	2	2	4	6
Mann.....	3	1	0	7
Stafford.....	0	1	1	1
Doughty.....	4	3	1	11
Pearson.....	0	0	0	0
Morrison.....	0	0	1	0
Alexander....	0	0	0	0
Averbuck.....	0	0	0	0

Totals.....20 15 15 55

NATIONAL INVITATION TOURNAMENT
FINAL

(At New York City)

BRADLEY (88)

	g	f	pf	p
.....	6	3	2	15
.....	11	4	4	26
.....	4	1	0	9
.....	1	9	2	11
.....	5	3	1	13
.....	3	1	5	7
.....	1	0	1	2
.....	1	1	0	3
.....	1	0	2	2
.....	0	0	0	0
.....	0	0	0	0
.....	0	0	0	0

Totals.....33 22 17 88

PROVIDENCE (72)

	g	f	pf	p
Whelan.....	3	0	2	6
Leonard.....	3	1	4	7
Hadnot.....	5	0	5	10
Egan.....	5	10	2	20
Wilkens.....	10	5	5	25
Moynahan.....	2	0	2	4
Guimares.....	0	0	0	0
Folliard.....	0	0	0	0
Gibson.....	0	0	0	0

Totals.....28 16 20 72

Half-time score—Providence 37, Bradley 29.

Free throws missed—Herndon, Saunders 2, Owens, Tienard, Hadnot 6, Egan.

COLLEGIATE RANKINGS

(Associated Press poll)

Team	1st Place votes	Pts.
Cincinnati.....	92	1,832
Indiana.....	46	1,716
State.....	14	1,492
Y.....	14	1,396
Virginia.....	10	1,001

ALL-AMERICA SELECTIONS

(Associated Press poll)

FIRST TEAM

Oscar Robertson, Cincinnati
 West Virginia
 Ohio State
 Cliff, California
 n, St. John's

SECOND TEAM

Tom Sith, St. Bonaventure
 Terry Dischinger, Purdue
 Roger Kaiser, Georgia Tech
 Chet Walker, Bradley
 Len Wilkens, Providence

NATIONAL A.A.U. CHAMPIONSHIP

(At Denver)

PEORIA CATS (115)

	g	f	pf	p
Boozer.....	12	6	3	30
Adams.....	7	2	1	16
Prudhoe.....	1	3	5	5
Ohl.....	13	2	2	28
Crittenden...	0	8	1	8
Plunkett.....	1	0	3	2
Kelley.....	2	7	2	11
Hill.....	5	2	2	12
Wolf.....	1	1	1	3

Totals.....42 31 20 115

AKRON WINGFOOTS (99)

	g	f	pf	p
Slack.....	5	1	3	11
Reigel.....	5	4	3	14
Francis.....	5	8	3	18
Swyers.....	12	3	5	27
Kernan.....	3	0	1	6
Fairfield.....	0	0	1	0
Wolf.....	2	0	1	4
Price.....	2	5	5	9
Decker.....	2	0	4	4
Sullens.....	2	2	3	6

Totals.....38 23 29 99

Half-time score—Peoria 62, Akron 48.

Free throws missed—Boozer 2, Adams 2, Crittenden 2, Plunkett, Kelley, Wolf, Reigel 2, Francis 4, Swyers, Price.

U. S. OLYMPIC TRYOUTS
FINAL

(At Denver)

N. C. A. A. ALL-STARS (124)

	g	f	pf	p
Robertson.....	6	8	4	20
Dischinger.....	5	8	4	18
Imhoff.....	3	1	4	7
West.....	15	9	2	39
Arnette.....	3	0	4	6
T. Stith.....	2	0	0	4
Johnson.....	2	0	5	4
Bellamy.....	3	1	2	7
Darrow.....	5	0	5	10
Kaiser.....	3	1	0	7
Sanders.....	1	0	2	2

Totals.....48 28 32 124

PEORIA CATS (97)

	g	f	pf	p
Boozer.....	6	2	3	14
Adams.....	2	5	5	9
Prudhoe.....	2	0	2	4
Ohl.....	3	0	5	6
Crittenden...	2	5	5	9
Meschery.....	8	3	4	19
Swartz.....	2	5	4	9
Plunkett.....	2	0	2	4
Kelley.....	4	3	5	11
Williams.....	1	0	4	2
Hill.....	2	1	0	5
Wolfe.....	2	1	0	5

Totals.....36 25 39 97

Half-time score—N. C. A. A. 58, Peoria 44.

Free throws missed—Robertson, Dischinger 4, West 3, Johnson, Boozer 5, Adams, Ohl, Crittenden 3, Meschery, Swartz 2, Kelley, Wolfe.

OTHER CHAMPIONS

N. C. A. A. College Division—Evansville, Ind.

National Association (N. A. I. A.)—Southwest Texas State

National Industrial League—Peoria Cats

National Junior College—Parsons, Kan.

WOMEN

National A. A. U.—Nashville (Tenn.) Business College

Robertson Shatters Scoring Marks

Oscar Robertson, Cincinnati's All-American player, ended his collegiate career in 1960 as the greatest scorer in major college basketball history. The 6-5 ace scored 2,973 points in 88 games over three seasons. His average of 33.8 points for three years was another record. And so was his total of 1,052 field goals.

PROFESSIONAL BASKETBALL

NATIONAL BASKETBALL ASSOCIATION

Source: Haskell Cohen, Publicity Director, National Basketball Association.

REGULAR SEASON

Final Standing of the Clubs

EASTERN DIVISION

	W	L	Pct.	Scoring avg. For	Agst.
Boston Celtics.....	59	16	.786	124.5	116.3
Philadelphia Warriors.....	49	26	.653	118.6	116.0
Syracuse Nationals.....	45	30	.600	118.9	116.4
New York Knickerbockers.....	27	48	.360	117.3	119.6

WESTERN DIVISION

St. Louis Hawks.....	46	29	.613	113.4	110.7
Detroit Pistons.....	30	45	.400	111.5	115.0
Minneapolis Lakers.....	25	50	.333	107.2	111.4
Cincinnati Royals.....	19	56	.353	111.1	117.4

Leading Scorers

	GP	FG	FT	Pts.	Avg.
Wilt Chamberlain, Phila.....	72	1065	577	2707	37.6
Jack Twyman, Cincinnati.....	75	870	598	2338	31.2
Elgin Baylor, Minneapolis.....	70	755	564	2074	29.6
Bob Pettit, St. Louis.....	72	669	544	1882	26.1
Cliff Hagan, St. Louis.....	75	719	421	1859	24.8
Gene Shue, Detroit.....	75	6	472	1712	22.8
Dolph Schayes, Syracuse.....	75	578	533	1689	22.5
Tom Heinsohn, Boston.....	75	673	283	1629	21.7
Richie Guerin, New York.....	74	579	457	1615	21.8
Paul Arizin, Philadelphia.....	72	893	420	1606	22.3
George Yardley, Syracuse.....	73	549	377	1475	20.2
Bob Cousy, Boston.....	75	568	318	1455	19.4
Clyde Lovellette, St. Louis.....	68	550	316	1416	24.8
Willie Naulls, New York.....	65	551	286	1388	21.3
Bill Sharman, Boston.....	74	589	252	1370	19.3
Bill Russell, Boston.....	74	595	240	1350	18.2
Billie Russell, Boston.....	75	510	312	1332	17.8
Barley Howell, Detroit.....	64	412	363	1187	18.5
Ken Sears, New York.....	75	426	270	1122	15.0
Tom Gola, Philadelphia.....	73	422	273	1117	15.3
Frank Ramsey, Boston.....	75	436	233	1105	14.7
John Kerr, Syracuse.....	66	3	4	1004	15.2
Phil Jordan, Cincinnati.....	75	381	242	1004	13.4
Larry Costello, Syracuse.....	71	372	249	993	14.0
Rudy LaRusso, Minneapolis.....	71	355	265	976	13.7
Charles Tyra, New York.....	74	406	133	945	12.8
Rod Hundley, Minneapolis.....	73	365	203	933	12.8
Hal Greer, Syracuse.....	70	388	187	924	13.2
Sam Jones, Boston.....	74	365	168	878	11.9
Larry Foust, Minn.-St. L.....	72	312	273	877	12.2
Dick Garmaker, Minn.-N. Y.....	70	323	203	849	12.1
Arlen Bockhorn, Cincinnati.....	75	373	145	791	10.6
Guy Rodgers, Philadelphia.....	68	338	111	787	11.6
Ed Conlin, Detroit.....	70	360	181	781	11.1
Wayne Embry, Cincinnati.....	73	303	167	773	10.6
Win Wilfong, Cincinnati.....	72	283	161	727	10.1
Dave Phontek, Cinn.-St. L.....	77	292	129	713	9.2
Archie Dees, Detroit.....	72	271	185	707	9.7

Individual Leaders

Points—Wilt Chamberlain, Philadelphia.....	2707
Scoring average—Wilt Chamberlain, Philadelphia.....	37.6
Field goals—Wilt Chamberlain, Philadelphia.....	1065
Field goal percentage—Ken Sears, New York.....	.477
Free throws scored—Jack Twyman, Cincinnati.....	598
Free throws scored, percentage—Dolph Schayes, Syracuse.....	.892
Rebounds—Wilt Chamberlain, Philadelphia.....	1941
Rebounds per game—Wilt Chamberlain, Philadelphia.....	26.9
Assists—Bob Cousy, Boston.....	715
Personal fouls committed—Tom Gola, Philadelphia.....	311
Most points, one game—Elgin Baylor, Minneapolis.....	64

Official All-N. B. A. Selections

FIRST TEAM

Bob Pettit, St. Louis
Elgin Baylor, Minneapolis
Wilt Chamberlain, Philadelphia
Bob Cousy, Boston
Gene Shue, Detroit

SECOND TEAM

Jack Twyman, Cincinnati
Dolph Schayes, Syracuse
Bill Russell, Boston
Richie Guerin, New York
Bill Sharman, Boston

PLAYOFFS

Eastern Division

Semi-final—Philadelphia defeated Syracuse, 2 games to 1.

Final—Boston defeated Philadelphia, 4 games to 2.

*March 16—Boston 111, Philadelphia 105

*March 18—Philadelphia 115, Boston 110

*March 19—Boston 120, Philadelphia 90

*March 20—Boston 112, Philadelphia 104

*March 22—Philadelphia 128, Boston 107

*March 24—Boston 119, Philadelphia 117

* At Boston.

Western Division

Semi-final—Minneapolis defeated Detroit, 2 games to 0.

Final—St. Louis defeated Minneapolis, 3 games to 3.

*March 16—St. Louis 112, Minneapolis 99

*March 17—Minneapolis 120, St. Louis 113

*March 19—St. Louis 93, Minneapolis 89

*March 20—Minneapolis 103, St. Louis 101

*March 22—Minneapolis 117, St. Louis 110 (OT)

*March 24—St. Louis 117, Minneapolis 96

*March 26—St. Louis 97, Minneapolis 86

* At Minneapolis.

Championship Series

Boston defeated St. Louis, 4 games to 2

*March 27—Boston 140, St. Louis 122

*March 28—St. Louis 113, Boston 103

*April 2—Boston 102, St. Louis 86

*April 3—St. Louis 106, Boston 96

*April 5—Boston 127, St. Louis 102

*April 7—St. Louis 105, Boston 102

*April 9—Boston 122, St. Louis 103

* At St. Louis.

Leading Scorers

	GP	FG	FT	Pts.
Bob Pettit, St. Louis.....	14	129	107	365
Cliff Hagan, St. Louis.....	14	125	89	339
Elgin Baylor, Minneapolis.....	9	111	79	301
Wilt Chamberlain, Phila.....	9	125	49	299
Tom Heinsohn, Boston.....	13	112	60	284

Individual Leaders

Points—Bob Pettit, St. Louis.....

Scoring average—Elgin Baylor, Minneapolis.....

Field goals—Bob Pettit, St. Louis.....

Field goal percentage—Wilt Chamberlain, Philadelphia.....

Free throws scored—Bob Pettit, St. Louis.....

Free throws scored, percentage—Dolph Schayes, Syracuse.....

Rebounds—Bill Russell, Boston.....

Assists—Bob Cousy, Boston.....

Personal fouls committed—Cliff Hagan, St. Louis.....

Most points, one game—Wilt Chamberlain, Philadelphia.....

East Wins N.B.A. All-Star Game

The East scored its seventh victory of the series in the tenth annual All-Star Game of the National Basketball Association, 1960. Led by Wilt Chamberlain, who scored 23 points, the East defeated the West, 128-115, in Philadelphia's Convention Hall on Jan. 22. Jack Twyman of the losers led all scorers with 27 points.

ICE HOCKEY

National Hockey League

REGULAR SEASON

Final Standing of the Clubs

	W	L	T	Goals For	Agst.	Pts.
Canadiens.....	40	18	12	255	178	92
Maple Leafs....	35	26	9	199	195	79
Black Hawks....	28	29	13	191	180	69
Red Wings.....	26	29	15	186	197	67
Bruins.....	28	34	8	220	241	64
Pack Rangers.....	17	38	15	187	247	49

Leading Scorers

	GP	G	A	Pts.	PIM
Hull, Chicago.....	70	39	42	81	68
Horvath, Boston....	68	39	41	80	60
Beveau, Montreal....	60	34	40	74	57
Thgate, New York....	70	26	48	74	28
Richard, Montreal....	70	30	43	73	66
Howe, Detroit.....	70	28	45	73	46
Geoffrion, Montreal..	59	30	41	71	36
Kenney, Boston.....	70	20	49	69	28
Huk, Boston.....	69	29	39	68	121
Prntice, New York....	70	32	34	66	43
Moore, Montreal....	62	22	42	64	54
Iman, Detroit.....	70	24	34	58	46
Chicago.....	70	18	37	55	31
Ford, Toronto.....	70	24	28	52	81
Cyk, Boston.....	56	16	36	52	26
Armstrong, Toronto..	70	23	28	51	60
Mcorn, Detroit.....	70	22	29	51	32
Donlin, Montreal....	59	17	34	51	59
Vecchio, Detroit....	70	19	28	47	8
Prntice, New York....	70	19	27	46	4
Provost, Montreal....	70	17	29	46	42
Johns, Boston.....	65	20	25	40	62
Spazzini, Boston....	69	12	33	45	26
Prnte, Chicago.....	70	7	38	45	100
one, Boston.....	63	16	28	44	58
ette, Montreal.....	65	21	22	43	4
f, Toronto.....	67	19	22	41	51
Chicago.....	70	20	20	40	54
Oliver, Detroit.....	54	20	19	39	16
Mahlovich, Toronto..	70	18	21	39	61
Shall, Montreal....	70	16	22	38	4
Pris, Toronto.....	70	13	25	38	29
ullivan, New York....	70	12	25	37	81
Play, Chicago.....	63	15	21	36	18
stead, Toronto.....	53	15	21	36	63
Prin, New York.....	66	14	22	36	16
Prerenko, Chicago....	61	13	23	36	71
Prn, Boston.....	67	24	11	35	64
Richard, Montreal..	51	19	16	35	50
art, Toronto.....	67	14	20	34	28
nley, Toronto.....	64	10	23	33	22
on, Toronto.....	70	3	29	32	69
son, Toronto.....	70	15	16	31	8
Prnovost, Montreal..	69	12	19	31	61
by, New York.....	65	9	22	31	60
alfour, Chicago.....	61	18	12	30	55
sko, Chicago.....	69	3	27	30	110
berger, Chicago.....	52	12	18	30	15
skel, New York.....	69	13	16	29	27
skel, Det.-Tor.....	68	12	17	29	18
len, New York.....	64	8	21	29	6
Prnson, Montreal....	64	4	25	29	69

Official All-N.H.L. Selections

TEAM	Pos.	SECOND TEAM
Chi.....	G.....	Jacques Plante, Mont.
ay, Mont.....	D.....	Allan Stanley, Tor.
Prnovost, Det.....	D.....	Pierre Pilote, Chi.
au, Mont.....	C.....	Bronco Horvath, Bost.
re, Det.....	R.W.....	Bernie Geoffrion, Mont.
Chi.....	L.W.....	Dean Prentice, New York

Trophy Winners

(most valuable player)—Gordie Howe, Detroit
 (leading scorer)—Dickie Moore, Montreal
 (sportsmanship)—Don McKenney, Boston
 (leading rookie)—Bill Hay, Chicago
 (leading goalie)—Jacques Plante, Montreal
 (best defenseman)—Doug Harvey, Montreal

STANLEY CUP PLAYOFFS

Preliminary Series

Montreal defeated Chicago, 4 games to 0.

*March 24—Montreal 4, Chicago 3
 *March 26—Montreal 4, Chicago 3 (8:38 ovt.)
 March 29—Montreal 4, Chicago 0
 March 31—Montreal 2, Chicago 0
 * At Montreal.

Toronto defeated Detroit, 4 games to 2.

*March 23—Detroit 2, Toronto 1
 *March 26—Toronto 4, Detroit 2
 March 27—Toronto 5, Detroit 4 (43:00 ovt.)
 March 29—Detroit 2, Toronto 1 (1:54 ovt.)
 *April 2—Toronto 5, Detroit 4
 April 3—Toronto 4, Detroit 2
 * At Toronto.

Championship Series

Montreal won the Stanley Cup, defeating Toronto, 4 games to 0.

*April 7—Montreal 4, Toronto 2
 *April 9—Montreal 2, Toronto 1
 April 12—Montreal 5, Toronto 2
 April 14—Montreal 4, Toronto 0
 * At Montreal.

Leading Scorers

	GP	G	A	Pts.	PIM
Henri Richard, Montreal....	8	9	9	12	9
Bernie Geoffrion, Montreal..	8	2	10	12	4
Red Kelly, Toronto.....	10	3	8	11	2
Dickie Moore, Montreal....	8	6	4	10	4
Alex Delvecchio, Detroit....	6	2	6	8	0
Jean Beliveau, Montreal....	8	5	2	7	6
Bert Olmstead, Toronto.....	10	3	4	7	0
Larry Regan, Toronto.....	10	3	3	6	0
Dick Duff, Toronto.....	10	2	4	6	6
Gordie Howe, Detroit.....	6	1	5	6	4
Bob Pulford, Toronto.....	10	4	1	5	10
Allan Stanley, Toronto.....	10	2	3	5	2
Carl Brewer, Toronto.....	10	2	3	5	16
George Armstrong, Toronto..	10	1	4	5	4
Marcel Bonin, Montreal....	8	1	4	5	12
Frank Mahlovich, Toronto....	10	3	1	4	27
Norm Ullman, Detroit.....	6	2	2	4	0
Don Marshall, Montreal....	8	2	2	4	0
Len Haley, Detroit.....	6	1	3	4	6
Maurice Richard, Montreal..	8	1	3	4	2
Val Fonteyne, Detroit.....	6	0	4	4	0

HANDBALL

U.S.H.A. Championships—Four-Wall

(At San Francisco)

Singles—Jimmy Jacobs, Los Angeles A. C.
 Doubles—Dick Weisman, Los Angeles A. C.
 Masters doubles—George Brotemarkle-Bill Feilvou, Los Angeles A. C.

A.A.U.—Y.M.C.A.—Four-Wall

(At Minneapolis)

Singles—Jimmy Jacobs, Los Angeles A. C.
 Doubles—John Sloan-Phil Collins, Chicago Town Club

A.A.U.—One Wall

(At Brooklyn)

Singles—Carl Obert, New York A. C.
 Doubles—Oscar and Ruby Obert, New York A. C.

National Intercollegiate

(At Boulder, Colo.)

Singles—Larry Wood, Colorado
 Team—Texas

Minor League Hockey**AMERICAN LEAGUE****Final Standing of the Clubs**

	W	L	T	Goals		
				For	Agst.	Pts.
*Springfield.....	43	23	6	280	219	92
Rochester.....	40	27	5	285	211	85
Providence.....	38	32	2	251	237	78
Cleveland.....	34	30	8	267	229	76
Buffalo.....	33	35	4	251	271	70
Hershey.....	28	37	7	226	238	63
Quebec.....	19	51	2	178	333	40

* Won playoffs.

Leading Scorers

	GP	G	A	Pts.	PIM
Freddie Glover, Cleveland.....	72	38	69	107	143
Bill Sweeney, Springfield.....	67	37	69	96	14
Floyd Smith, Springfield.....	71	31	61	82	26
Stan Baluk, Providence.....	65	23	67	80	60
Larry Wilson, Buffalo.....	64	33	45	78	18
Willie Marshall, Hershey.....	72	38	40	78	99
Dick Gamble, Buffalo.....	72	27	50	77	22
Stan Smrke, Rochester.....	67	40	36	76	18
Bruce Cline, Springfield.....	70	25	50	75	9
Bob Nevin, Rochester.....	71	32	42	74	10

WESTERN LEAGUE**Final Standing of the Clubs**

	W	L	T	Goals		
				For	Agst.	Pts.
*Vancouver.....	44	20	6	230	177	94
Seattle.....	38	28	4	270	219	80
Edmonton.....	37	29	4	246	240	78
Victoria.....	37	29	4	227	194	78
Calgary.....	32	36	2	245	227	66
Winnipeg.....	25	42	3	224	262	53
Spokane.....	19	48	3	201	324	41

* Won playoffs.

Leading Scorers

	GP	G	A	Pts.	PIM
Guyle Fielder, Seattle.....	69	31	64	95	12
Bill MacFarland, Seattle.....	70	35	51	86	36
Rudy Filion, Seattle.....	70	36	49	85	2
Lou Jankowski, Calgary.....	70	42	42	84	9
Art Jones, Victoria.....	70	35	44	79	30
Marc Boileau, Seattle.....	68	32	45	77	54
Tom McVie, Seattle.....	70	27	44	71	34
Gene Achtmichuk, Edmonton.....	67	20	51	71	44
Collin Kilburn, Vancouver.....	70	23	47	70	79
Roger Dejordy, Edmonton.....	70	34	34	68	34

EASTERN PROFESSIONAL LEAGUE**Final Standing of the Clubs**

	W	L	T	Goals		
				For	Agst.	Pts.
Sudbury.....	36	26	8	310	283	80
*Montreal.....	30	26	14	215	198	74
Hull-Ottawa.....	31	28	11	249	241	73
Three Rivers.....	30	31	9	226	235	69
Sault Ste. Marie.....	27	32	11	248	262	65
Kingston.....	28	39	3	297	326	59

* Won playoffs.

Leading Scorers

	GP	G	A	Pts.	PIM
Orval Tessier, Kingston.....	70	59	67	126	10
Tom McCarthy, Sudbury.....	70	46	82	108	86
Bob Courcy, Hull-Ott.....	70	46	56	102	71
Billy Carter, Hull-Ott.....	70	42	60	102	2
Sam Bettio, Sudbury.....	67	45	56	101	39
Cal Gardner, Kingston.....	65	32	61	93	57
Gilles Tremblay, Hull-Ott.....	67	32	51	83	45
Milan Marcetta, S. Ste. Marie.....	70	28	55	83	19
Cleland Mortson, Sudbury.....	58	26	55	80	70
Garry Ouellette, Kingston.....	64	35	42	77	23
Wayne Hicks, S. Ste. Marie.....	69	30	47	77	64

Amateur Hockey**EASTERN LEAGUE****Final Standing of the Clubs****NORTHERN DIVISION**

	W	L	T	Goals	
				For	Agst.
Clinton.....	35	27	2	244	202
New Haven.....	32	29	3	217	189
Philadelphia.....	31	30	3	226	219
New York.....	19	44	1	205	294

SOUTHERN DIVISION

	W	L	T	For	Agst.
*Johnstown.....	45	18	1	255	176
Charlotte.....	31	29	4	243	244
Greensboro.....	26	33	5	229	250
Washington.....	25	34	5	207	253

* Won playoffs.

INTERNATIONAL LEAGUE**Final Standing of the Clubs****EASTERN DIVISION**

	W	L	T	Goals	
				For	Agst.
Fort Wayne.....	50	16	2	312	187
Louisville.....	37	30	1	303	276
Toledo-St. Louis.....	28	36	4	266	298
Indianapolis.....	25	40	3	234	322

WESTERN DIVISION

	W	L	T	For	Agst.
*St. Paul.....	41	21	6	261	188
Minneapolis.....	39	27	2	297	233
Milwaukee.....	24	42	1	251	314
Omaha.....	15	47	5	198	303

* Won playoffs.

OTHER CHAMPIONS

Olympic—United States
 National Collegiate—Denver
 National senior—Rockland, Mass.
 National midget—Dollar Bay, Mich.
 National bantam—Ivory Club, Detroit
 Canadian senior (Allan Cup)—Chatham (Ont.) Maroons
 Canadian junior (Memorial Cup)—St. Catharines (O.) Teepees

BOBSLEDDING

Source: Lucien Miron, Adirondack Bobsled Club

World Championships

(At Cortina D'Ampezzo, Italy)

2-man—Eugenio Monti-Renzo Alvera, Italy..... 5:11
 4-man—Eugenio Monti, driver; Nordio; Sergio Slopas; Renzo Alvera, brake, Italy..... 5:04

North American

(At Lake Placid, N. Y.)

2-man—Eugenio Monti, Italy—Charles Pandolf, Saranac Lake, N. Y..... 4:52
 4-man—Eugenio Monti, Italy, driver; Pat Martin, Massena, N. Y.; Gary Sheffield, Lake Placid, N. Y.; Charles Pandolf, Saranac Lake, N. Y., brake... 4:38

National A. A. U.

(At Lake Placid, N. Y.)

2-man—Eugenio Monti, Italy—Gary Sheffield, Lake Placid, N. Y..... 4:57
 4-man—Joseph McKillip, driver; Paul King; Mike Peer; James Watson, Saranac Lake, B. C..... 4:46

ICE (SPEED) SKATING

Source: Ken Hall, *Detroit Times*, American Skating Union Statistician.

World Championships

(At Davos, Switzerland)

—Boris Stenin, U.S.S.R.	186.487 pts.
—Eugeny Grishin, U.S.S.R.	0:40.5
—Boris Stenin, U.S.S.R.	2:10.7
—Valery Stenin, U.S.S.R.	8:06.1
—Jan Pesman, Netherlands	16:53.7

WOMEN

(At Ostersund, Sweden)

—Valentina Stenina, U.S.S.R.	208.833 pts.
—Lidia Skoblikova, U.S.S.R.	0:49.5
—Klara Guseva, U.S.S.R.	1:40.2
—Valentina Stenina, U.S.S.R.	2:37.6
—Lidia Skoblikova, U.S.S.R.	5:23.9

North American Outdoor

(At Fowler Lake, Wis.)

—Tom Dela Augustitus, Detroit	24 pts.
—Andy Korenak, West Allis, Wis.	0:18.8
—Tom Augustitus, Detroit	0:37.3
—Tom Augustitus, Detroit	1:25.9
—Tom Augustitus, Detroit	2:39.3
—El Ellito, Elmhurst, Ill.	3:23.8
—Tom Augustitus, Detroit	6:27.8
—Andy Korenak, West Allis, Wis.	17:17.5
—ate—Bob Busse, Madison, Wis.	
—Tom Gray, Minneapolis	

WOMEN

—Mary Novak, Lombard, Ill.	22 pts.
—Mary Novak, Lombard, Ill.	0:21.8
—Mary Novak, Lombard, Ill.	0:41.1
—Mary Novak, Lombard, Ill.	1:31.3
—Mary Novak, Lombard, Ill.	2:34.8
—Mary Novak, Lombard, Ill.	3:31.2
—ate—Beverly Gorton, Minn.	
—andra Danielson, Minneapolis	

North American Indoor

(At Lake Placid, N. Y.)

—Steve Stenson, College Point, N. Y.	17 pts.
—Steve Stenson, College Point, N. Y.	0:41.0
—Steve Stenson, College Point, N. Y.	1:26.3
—Kenneth LeBel, Lake Placid, N. Y.	2:14.5
—Steve Stenson, College Point, N. Y.	3:01.6
—McCarthy, Queens Village, N. Y.	6:27.8
—ate—Bob Fenn, Flushing, N. Y.	
—ck Walters, Brighton, Mass.	

WOMEN

—Jean Ashworth, Wilmington, Mass.	20 pts.
—Jean Ashworth, Wilmington, Mass.	0:44.4
—Jean Ashworth, Wilmington, Mass.	1:33.4
—Jean Ashworth, Wilmington, Mass.	2:27.0
—Ashworth, Wilmington, Mass.	3:22.7
—ate—Gail Purdy, Glens Falls, N. Y.	
—nce Smith, Rochester, N. Y.	

Retains Barrel Jumping Crown

LeBel of the University of Hartford is the world barrel jumping champion—the sixth consecutive year in 1960. Competing on the ice rink of the Grossinger Country Club, LeBel cleared 16 feet for a distance of 26 feet 1½ inches.

United States Outdoor

(At St. Paul, Minn.)

Champion—Ken Bartholomew, Minneapolis	18 pts.
220 yds.—Steve Stenson, College Point, N. Y.	0:18.9
440 yds.—Ken Bartholomew, Minneapolis	0:35.7
880 yds.—Ken Bartholomew, Minneapolis	1:24.7
¼ mi.—Tom Augustitus, Detroit	2:15.9
1 mile—Ken Bartholomew, Minneapolis	3:00.1
2 mi.—Tom Augustitus, Detroit	5:57.2
5 mi.—Stanley Fail, Los Angeles	15:16.0
Intermediate—Paul Nelson, Minneapolis	
Junior—Tom Gray, Minneapolis	

WOMEN

Champion—Mary Novak, Lombard, Ill.	25 pts.
220 yds.—Mary Novak, Lombard, Ill.	0:21.2
440 yds.—Mary Novak, Lombard, Ill.	0:40.3
880 yds.—Mary Novak, Lombard, Ill.	1:45.5
¼ mi.—Mary Novak, Lombard, Ill.	2:21.6
1 mile—Mary Novak, Lombard, Ill.	3:41.1
Intermediate—Sylvia White, Butte, Mont.	
Junior—Barbara Mueller, Thiensville, Wis.	

United States Indoor

Champion—Terry McDermott, Essexville, Mich.	18 pts.
440 yds.—Steve Stenson, College Point, N. Y.	0:42.5
880 yds.—Terry McDermott, Essexville, Mich.	1:23.8
¼ mi.—Keith Meyer, Glen Ellyn, Ill.	2:11.3
1 mile—Terry McDermott, Essexville, Mich.	2:54.6
2 mi.—Tom Augustitus, Detroit	6:20.1
Intermediate—Bob Fenn, Flushing, N. Y.	
Junior—Jack Walters, Brighton, Mass.	

WOMEN

Champion—Mary Novak, Lombard, Ill.	20 pts.
440 yds.—Mary Novak, Lombard, Ill.	0:44.0
880 yds.—Mary Novak, Lombard, Ill.	1:32.0
¼ mi.—Mary Novak, Lombard, Ill.	2:27.4
1 mile—Mary Novak, Lombard, Ill.	3:27.5
Intermediate—Karen Kaper, Chicago	
Junior—Barbara Mueller, Thiensville, Wis.	

ICE (FIGURE) SKATING

World Championships

(At Vancouver, Canada)

Men—Alain Giletti, France	
Women—Carol Heiss, Ozone Park, N. Y.	
Pairs—Robert Paul—Barbara Wagner, Canada	
Dance—J. L. Courtney Jones—Doreen Denny, Great Britain	

United States Championships

(At Seattle)

Men—David Jenkins, Colorado Springs, Colo.	
Women—Carol Heiss, Ozone Park, N. Y.	
Pairs—Ronald and Nancy Ludington, Boston	
Gold dance—Charles Phillips Jr.—Margie Achilles, Los Angeles	
Silver dance—Robert and Patricia Dineen, Lake Placid, N. Y.	
Junior—Douglas Ramsay, Detroit	
Women's junior—Karen Howland, Seattle	
Junior pairs—William and Laurie Hickox, San Francisco	
Novice—Robert Madden, Tacoma, Wash.	
Women's novice—Carol Stephanie Noir, New York	
Team (Harned Trophy)—Broadmoor S. C., Colorado Springs	

European Championships

(At Garmisch, Germany)

Men—Alain Giletti, France	
Women—Sjoukje Dijkstra, Netherlands	
Pairs—Hans Baumber—Marika Kilius, Germany	
Dance—J. L. Courtney Jones—Doreen Denny, Great Britain	

TRACK AND FIELD

National A. A. U. Championships

Men's Indoor

(At New York City)

60 yds.—Paul Winder, Morgan State.....	0:06.2
60-yd. high hurdles—Hayes Jones, Eastern Michigan.....	0:07.1
600 yds.—Tom Murphy, New York A. C.....	1:11.7
1,000 yds.—Cary Weisiger, Duke.....	2:12.8
1 mile—Phil Coleman, Chicago T. C.....	4:09.0
1 mile walk—Ferenc Sipos, Santa Clara (Calif.) Youth Village.....	6:27.4
3 miles—Al Lawrence, Houston T. C.....	13:26.4
1,060-yd. medley relay—Winston-Salem (Frank Bowens, Robert Manning, Charles Lewis, Francis Washington).....	1:55.4
1 mile relay—Villanova (Paul Drayton, Robert Conhill, Carl Wagner, Joseph Manion).....	3:17.7
2-mile relay—New York A. C. (Bruce Lockerbie, Peter Levin, Ed McAllister, Ed Carafitis).....	7:46.2
High jump—John Thomas, Boston University.....	7 ft. 2 in.
Broad jump—Irvin Roberson, Philadelphia Pioneer Club.....	25 ft. 9½ in.
Pole vault—Don Bragg, Shanahan C. C.....	15 ft. 5 in.
Shot put—Parry O'Brien, Los Angeles.....	61 ft. 8 in.
35-lb. weight—Harold Connolly, So. California Striders.....	71 ft. 2½ in.
Team—New York A. C.....	24 pts.

Women's Indoor

(At Chicago)

50 yds.—Wilma Rudolph, Tennessee State.....	0:05.9
70-yd. hurdles—Joann Terry, Tennessee State.....	0:09.5
100 yds.—Wilma Rudolph, Tennessee State.....	0:10.7
220 yds.—Wilma Rudolph, Tennessee State.....	0:25.7
440 yds.—Rosa Marie Lovelace, Cleveland.....	1:02.1
880 yds.—Grace Butcher, Cleveland A. C.....	2:26.8
440-yd. relay—Tennessee State (Martha Hudson, Shirley Crowder, Lucinda Williams, Barbara Jones).....	0:49.6
440-yd. medley relay—Tennessee State (Annie Smith, Joann Terry, Lucinda Williams, Barbara Jones).....	0:51.8
High jump—Darlene Everhart, Topeka, Kan.....	5 ft. 3½ in.
Standing broadjump—Sandra Smith, Chicago.....	9 ft. ¾ in.
Shot put—Sharon Shepherd, Mapleton, Ore.....	45 ft. 3½ in.
Basketballthrow—Cel Ruthledge, Austin, Tex.....	120 ft. 10½ in.
Team—Tennessee State.....	49 pts.

Women's Outdoor

(At Corpus Christie, Tex.)

100 m.—Wilma Rudolph, Tennessee State.....	0:11.5
200 m.—Wilma Rudolph, Tennessee State.....	0:22.9
400 m.—Irene Robertson, Spartan A. C., Los Angeles.....	0:57.1
800 m.—Billie Pat Daniels, San Mateo (Calif.) Girls A. A.....	2:17.5
80-m. hurdles—Joann Terry, Tennessee State.....	0:11.4
400-m. relay—Tennessee State (Martha Hudson, Lucinda Williams, Barbara Jones, Wilma Rudolph).....	0:46.1
800-m. medley relay—Tennessee State (Shirley Crowder, Martha Hudson, Barbara Jones, Kenie Hart).....	1:47.0
High jump—Lis Josefson, Spartan A. C., Los Angeles.....	5 ft. 5½ in.
Broad jump—Willie White, Daley Youth Foundation, Chicago.....	19 ft. 1½ in.
Shot put—Earlene Brown, Spartan A. C., Los Angeles.....	49 ft. 8½ in.
Discus—Olga Connolly, Spartan A. C., Los Angeles.....	159 ft. 6½ in.
Javelin—Marjorie Larney, Queens Mercuriettes, New York.....	151 ft. 10¼ in.
Team—Tennessee State.....	93 pts.

Men's Outdoor

(At Bakersfield, Calif.)

100 m.—Ray Norton, Santa Clara (Calif.) Youth Village.....	0
200 m.—Ray Norton, Santa Clara (Calif.) Youth Village.....	0
400 m.—Otis Davis, Emerald Empire A. A., Eugene, Ore.....	1
800 m.—Jim Cerveny, Southern California Striders.....	1
1,500 m.—Jim Grelle, Emerald Empire A. A., Eugene, Ore.....	3
5,000 m.—Bill Dellinger, Emerald Empire A. A., Eugene, Ore.....	14
10,000 m.—Al Lawrence, Houston T. C.....	30
3,000-m. steeplechase—Phil Coleman, Chicago T. C.....	13
3,000-m. walk—Rudy Haluza, N. Y. Pioneer Club.....	13
110-m. high hurdles—Hayes Jones, Eastern Michigan.....	0
200-m. low hurdles—Dick Howard, Albuquerque, N. M.....	0
400-m. hurdles—Glenn Davis, Columbus, Ohio.....	0
High jump—John Thomas, Boston University.....	7 ft. 1 in.
Broad jump—Henk Visser, Santa Barbara (Calif.) A. C.....	25 ft. 1 in.
Hop, step and jump—Jra Davis, Philadelphia Pioneer Club.....	53 ft. 4 in.
Pole vault—Aubrey Dooley, Oklahoma State.....	15 ft. 9 in.
Shot put—Parry O'Brien, Southern California Striders.....	62 ft. 6 in.
Discus—Al Oerter, New York A. C.....	193 ft. 9 in.
Javelin—Al Cantello, U. S. Marines.....	271 ft. 1 in.
Hammer—Harold Connolly, Southern California Striders.....	224 ft. 4 in.
Team—Southern California Striders.....	106 ½ pts.

Other Outdoor

Decathlon—Rafer Johnson, Los Angeles.....	8,683
Pentathlon—Bill Toomey, U. of Colorado.....	3,010
Women's decathlon—Jo Anne Terry, Indianapolis.....	4,304
All-around—Charles Stevenson, New York A. C.....	7,555
15,000 m.—Alfred Confalone, Boston A. A.....	5
20,000 m.—John J. Kelley, Boston A. A.....	1:04
Marathon—John J. Kelley, Boston A. A.....	2:20
1-hour—Merle McGee, Santa Clara (Calif.) Youth Village.....	11 mi. 163

RELAYS

440-yd.—Cleveland Striders (Willia Love, Robert Miller, Fred Buckner, Nate Adams).....	0
1 mile—East York T. C., Canada (Bud Scott, Doug Gilbert, Stan Worsford, Bill Crothers).....	3
2½-mi. medley—New York A. C. (Art Evans, William Lenskold, William Clancy, Ed Moran).....	10

WALKING

10,000 m.—Rudy Haluza, N. Y. Pioneer Club.....	48
15,000 m.—Jack Blackburn, Ohio T. C.....	1:29
20,000 m.—Rudy Haluza, N. Y. Pioneer Club.....	1:34
25,000 m.—John Allen, Buffalo.....	2:03
30,000 m.—Rudy Haluza, N. Y. Pioneer Club.....	2:38
35,000 m.—Ron Zinn, U. S. Military Academy.....	3:22
40,000 m.—Ron Laird, N. Y. Pioneer Club.....	3:45
50,000 m.—Ron Laird, N. Y. Pioneer Club.....	4:40

ROQUE

American Roque League Championships

(At Decatur, Ill.)

First division—Bobby Arnold, Los Angeles.....	
Second division—W. W. Smith, Strasburg, Ill.....	
Two-ball—Bobby Arnold, Los Angeles.....	

Track and Field (Cont.)

NATIONAL COLLEGIATE A.A.

(At Berkeley, Calif.)

—Charlie Tidwell, Kansas.....	0:10.2
—Charlie Tidwell, Kansas.....	0:20.8
—Ted Woods, Colorado.....	0:45.7
—George Kerr, Illinois.....	1:46.4
—Dyrol Burleson, Oregon.....	3:44.2
—Al Lawrence, Houston.....	14:19.8
—steplechase—Charlie Clark, San Jose State.....	9:01.1
—igh hurdles—Jim Johnson, U. C. L. A.....	0:14.0
—urdles—Cliff Cushman, Kansas.....	0:50.8
—p—John Thomas, Boston University.....	7 ft.
—p—Ralph Boston, Tennessee State.....	25 ft. 5¼ in.
—p and jump—Luther Hayes, Southern.....	50 ft. 11½ in.
—nia.....	14 ft. 9 in.
—lt—J. D. Martin, Oklahoma.....	61 ft. 9 in.
—Dallas Long, Southern California.....	188 ft. 3½ in.
—Dick Cochran, Missouri.....	268 ft. 9 in.
—Bill Alley, Kansas.....	209 ft. 2 in.
—John Lawlor, Boston University.....	50 pts.
—Kansas.....	

INDOOR MILE WINNERS

—rn, Baltimore—Mike Fleming, Quantico Ma.....	4:20.5
—ssets K. of C.—Phil Coleman, Chicago T. C.....	4:07.0
—les Invitation—Dyrol Burleson, Oregon.....	4:06.0
—on Star—Ed Moran, New York A. C.....	4:08.3
—onal Meet of Champions, Winnipeg—Dick.....	4:12.2
—Chicago T. C.....	4:06.4
—Wannamaker)—Jim Grelle, Eugene, Ore.....	4:30.5
—tan College—Grady Crumpley, St. John's.....	4:03.8
—A. (Hunter)—Phil Coleman, Chicago T. C.....	4:11.7
—nia Inquirer—Lászlo Tabori, Santa Clara.....	4:05.9
—Youth Village.....	4:05.4
—es Times—Phil Coleman, Chicago T. C.....	4:24.7
—A. C. (Baxter)—Jim Beatty, Santa Clara.....	4:09.0
—Youth Village.....	4:11.8
—Interscholastic—Don Donovan, Seton Hall.....	4:16.7
—atchogue, N. Y.....	4:11.9
—K. of C. A. U.—Phil Coleman, Chicago T. C.....	4:13.1
—K. of C. (Columbian)—Ed Moran, New York.....	4:09.9
—Gail Hodgson, Oklahoma.....	4:05.8
—llegiate—Ron Gregory, Notre Dame.....	4:09.0
—Ron Gregory, Notre Dame.....	4:18.5
—Jim Bowers, Illinois.....	4:13.6
—elays (Bankers)—Phil Coleman, Chicago.....	4:07.1
—Journal—Phil Coleman, Chicago T. C.....	4:09.7
—Eric Groon, Cornell.....	4:09.7
—ast Conference—Cary Weisiger, Duke.....	
—K. of C.—Jim Beatty, Santa Clara (Calif.).....	
—lage.....	
—Open, Winnipeg—Archie San Romani, Jr.,.....	
—Frosh.....	

BOSTON MARATHON

(26 miles, 385 yards)

—Kotila, Finland.....	2:20:54
—McKenzie, N. Y. Pioneer Club.....	2:22:18
—Green, Saugus, Mass.....	2:23:37
—Confalone, Boston A. A.....	2:26:30
—Koivumaki, Finland.....	2:28:30
—reckenridge, U. S. Marines.....	2:28:44
—Carman, Pittsburgh, Pa.....	2:29:06
—Cons, Culver City, Calif.....	2:30:39
—s Ryan, Long Beach, Calif.....	2:32:49
—Drake, Culver City, Calif.....	2:34:12

INTERCOLLEGIATE A.A.A.A. (IC4A)

Indoor

(At New York City)

60 yds.—Frank Budd, Villanova.....	0:06.2
60-yd. high hurdles—Bill Johnson, Maryland.....	0:07.4
600 yds.—Jim Stack, Yale.....	1:12.5
1,000 yds.—Tom Carroll, Yale.....	2:12.2
1 mile—Ron Gregory, Notre Dame.....	4:13.1
2 miles—Tom Laris, Dartmouth.....	8:59.0
1 mile relay—Villanova (Joseph Manion, Carl Wagner, Robert Coffill, Robert Raemore).....	3:18.8
2-mile relay—Villanova (Gerald Hackett, Jon Dante, Nick De Angelis, Pat Nicastro).....	7:45.8
High jump—John Thomas, Boston University.....	7 ft. ½ in.
Broad jump—John Buckley, Villanova.....	23 ft. 9¼ in.
Pole vault—Tom Reichert, Notre Dame, and Bjorn Anderson, Maryland.....	14 ft. 4 in.
Shot put—Joe Marchiony, Manhattan.....	57 ft.
35-lb. weight—John Lawlor, Boston University.....	63 ft. ¼ in.
Team—Villanova.....	27 pts.

Outdoor

100 yds.—Robert Brown, Penn State.....	0:09.7
220 yds.—Robert Brown, Penn State.....	0:20.6
440 yds.—Jim Wedderburn, New York University.....	0:47.4
880 yds.—Tom Carroll, Yale.....	1:51.9
1 mile—Richard Engelbrink, Penn State.....	4:09.1
3 mile—Bob Lowe, Brown.....	12:12.6
3,000-m. steeplechase—Bob Lowe, Brown.....	9:35.0
120-yd. high hurdles—Leon Pras, Villanova.....	0:14.1
440-yd. hurdles—James Moreland, Brown.....	0:52.6
1 mile relay—Villanova (Joseph Manion, Carl Wagner, Nick De Angelis, Robert Raemore).....	3:12.0
High jump—John Thomas, Boston University.....	7 ft. 1½ in.
Broad jump—Bob Reed, Pennsylvania.....	24 ft. ½ in.
Hop, step and jump—Winston Cooper, St. John's.....	46 ft. 11 in.
Pole vault—Barney Berlinger, Pennsylvania; Bjorn Anderson, Maryland; Tom Glass, Maryland, and Mike Kleinhans, Michigan State.....	14 ft.
Shot put—Joe Marchiony, Manhattan.....	56 ft. 3½ in.
Discus—Robert Batdorf, Pennsylvania.....	169 ft. 5 in.
Javelin—Nick Kovalakides, Maryland.....	235 ft. 7 in.
Hammer—John Lawlor, Boston University.....	199 ft. 7½ in.
Team—Villanova.....	38 pts.

CURLING

Source: H. T. Kreutzig, *North American Curling News*, South Milwaukee, Wis.

Champions

United States—Grafton, N. D. (Orvil Gilleshammer, skip; Glenn Gilleshammer, Wilmer Collette, Don LaBonte)
Women's United States—Indian Hill Club Squaws, Winnetka, Ill. (Mrs. Donald Jones, skip; Mrs. Hughston McBain, Mrs. Gilbert Scribner, Mrs. Clarence Jones)
Canadian—Regina, Sask. (Ernie Richardson, skip; Arnold Richardson, Garnet Richardson, Wes Richardson)

VOLLEYBALL

U.S. Volleyball Assn. Championships

(At Dallas)

Open—Westside Jewish Community Center, Los Angeles
Masters—Hollywood (Calif.) Comets
Intercollegiate—George Williams College, Chicago
Women—Santa Monica (Calif.) Mariners

INTERCOLLEGIATE CONFERENCE TEAM CHAMPIONS

National Collegiate Athletic Association (N. C. A. A.)

Baseball—Minnesota
Basketball—Ohio State (university division); Evansville, Ind. (college division)
Boxing—San Jose State
Fencing—New York University
Golf—Houston
Gymnastics—Penn State

Ice Hockey—Denver
Skiing—Colorado
Swimming—Southern California
Tennis—U.C.L.A.
Track and field—Kansas
Wrestling—Oklahoma

ATLANTIC COAST

Baseball—North Carolina
Basketball—Duke
Golf—North Carolina
Lacrosse—Maryland
Swimming—Maryland
Tennis—North Carolina
Track and field—Maryland (indoor and outdoor)
Wrestling—Maryland

BIG EIGHT

Baseball—Oklahoma State
Basketball—Kansas and Kansas State (tie)
Golf—Oklahoma State
Swimming—Oklahoma
Tennis—Oklahoma State
Track and field—Oklahoma (indoors), Kansas (outdoors)
Wrestling—Oklahoma

BIG FIVE

Basketball—California
Golf—Stanford
Tennis—U. C. L. A.
Track and field—Southern California

BIG TEN

Baseball—Minnesota
Basketball—Ohio State
Fencing—Illinois
Golf—Purdue
Gymnastics—Illinois
Ice hockey—Minnesota
Swimming—Michigan
Tennis—Michigan
Track and field—Michigan (indoor), Illinois (outdoor)
Wrestling—Michigan

BORDER

Baseball—Arizona
Basketball—New Mexico State
Golf—Arizona
Rifle—Arizona
Tennis—Arizona
Track and field—Arizona

EASTERN COLLEGE

Eastern Baseball League—Army
Metropolitan Baseball Conference—Hofstra
Tri-State Basketball League—Fairfield
E. C. A. C. Basketball Trophy (major college)—New York University and St. Bonaventure
E. C. A. C. Basketball Cup (small college)—Hofstra

Intercollegiate Fencing Association—New York University
Eastern Golf Association—Army
Eastern Gymnastic League—Army
Eastern Association of Rowing Colleges—Cornell
Eastern Swimming League—Yale
Eastern Tennis Association—Yale
Heptagonal Games Association, track and field—Army (indoors), Yale (outdoors)
Metropolitan Track and Field Association—Manhattan (indoors and outdoors)
Eastern Wrestling Association—Penn State and Pittsburgh (tie)

IVY LEAGUE

Basketball—Princeton
Fencing—Columbia and Princeton (tie)
Golf—Pennsylvania
Ice hockey—Dartmouth
Lacrosse—Princeton
Rifle—Princeton
Squash—Harvard
Wrestling—Cornell

MASON-DIXON

Baseball—Western Maryland
Basketball—American
Golf—Lynchburg
Swimming—American
Tennis—Johns Hopkins
Track and field—Roanoke
Wrestling—American

MID-AMERICAN

Baseball—Ohio U.
Basketball—Ohio U.
Golf—Ohio U.
Swimming—Bowling Green State
Tennis—Western Michigan
Track and field—Western Michigan
Wrestling—Bowling Green State

MIDDLE ATLANTIC STATES

Baseball—Moravian
Basketball—St. Joseph's (university division); Drexel (college division)
Golf—Bucknell
Swimming—Bucknell
Tennis—Swarthmore (Southern division); Lehigh (Northern division)
Track and field—LaSalle (university division); West Chester State (college division)
Wrestling—Wilkes

MOUNTAIN STATES

Baseball—Utah
Basketball—Utah

Golf—New Mexico
Swimming—Utah
Tennis—Utah
Track and field—Brigham Young
Wrestling—Wyoming

N.A.I.A.

Baseball—Whitworth
Basketball—Southwest Texas State
Golf—Lamar Tech
Swimming—Southern Illinois
Tennis—Lamar Tech
Track and field—Winston-Salem
Wrestling—Bloomsburg State

NATIONAL JR. COLLEGE

Baseball—Phoenix, Ariz.
Basketball—Parsons, Kan.
Golf—Odessa, Tex.
Track and field—Coffeyville, Kan.
Wrestling—Lamar, Colo.

SOUTHEASTERN

Baseball—Mississippi
Basketball—Auburn
Golf—Louisiana State
Swimming—Florida
Tennis—Georgia Tech
Track and field—Louisiana State

SOUTHERN

Baseball—The Citadel and Richmond (tie)
Basketball—West Virginia
Golf—Davidson
Swimming—V. M. I.
Tennis—George Washington
Track and field—V. M. I. (indoors), Citadel (outdoors)
Wrestling—V. P. I.

SOUTHWEST

Baseball—Texas
Basketball—Texas
Golf—Texas A. & M.
Swimming—Southern Methodist
Tennis—Southern Methodist
Track and field—Baylor

YANKEE

Baseball—Connecticut and Maine (tie)
Basketball—Connecticut
Golf—New Hampshire
Tennis—Massachusetts, New Hampshire and Vermont (tie)
Track and field—Rhode Island

SWIMMING

National A. A. U. Championships

Men's Indoor

(At New Haven, Conn.)

Free—Jeff Farrell, New Haven (Conn.) S. C.	0:48.2
Free—Jeff Farrell, New Haven (Conn.) S. C.	2:00.2
Free—Alan Somers, Bloomington, Ind.	4:22.6
Free—George Breen, Indianapolis A. C.	18:00.8
Back—Charles Bittick, Southern California	0:54.4
Back—Charles Bittick, Southern California	2:13.1
Breast—Dick Nelson, Ann Arbor, Mich.	1:02.4
Breast—William Mulliken, Oxford, Ohio	2:34.8
Butterfly—Mike Troy, Bloomington, Ind.	0:53.1
Butterfly—Mike Troy, Bloomington, Ind.	2:12.4
Medley—John McGill, New Haven (Conn.)	2:03.3
Medley—George Harrison, Palo Alto, Calif.	4:28.6
Freestyle relay—Southern California (Lance Tom Winters, Don Redington, Jon Henricks)	3:16.0
Medley relay—Southern California (Charles Lance Larson, Dennis Devine, Jon Henricks)	3:42.0
—Sam Hall, Columbus, Ohio	440.10 pts.
—Jozsef Gerlach, Ann Arbor, Mich.	446.65 pts.
Southern California	79 pts.

Men's Outdoor

(At Toledo, Ohio)

Free—Jeff Farrell, New Haven (Conn.) S. C.	0:54.8
Free—Jeff Farrell, New Haven (Conn.) S. C.	2:03.2
Free—Alan Somers, Indianapolis A. C.	4:21.9
Free—George Breen, Indianapolis A. C.	17:33.5
Back—Tom Stock, Indianapolis	1:02.9
Back—Tom Stock, Indianapolis	2:16.0
Breast—Chet Jastremski, Indianapolis A. C.	1:12.4
Breast—Peter Fogarasy, North Carolina State	2:38.8
Butterfly—Lance Larson, Los Angeles A. C.	0:58.7
Butterfly—Mike Troy, Indianapolis A. C.	2:13.4
Medley—Ted Stickles, San Mateo (Calif.)	2:21.1
Medley—Dennis Rounsavelle, Los Angeles	5:04.5
Medley relay—Indianapolis A. C. (Frank McChet Jastremski, Mike Troy, Peter Sintz)	4:09.2
Freestyle relay—Indianapolis A. C. (Peter George Breen, Alan Somers, Mike Troy)	8:17.0
—Sam Hall, WBNS S. C., Columbus	477.80 pts.
Dive—Gary Tobian, Los Angeles A. C.	466.4 pts.
Indianapolis A. C.	107 pts.

NATIONAL COLLEGIATE A.A.

(At Dallas)

Free—Bruce Hunter, Harvard	0:22.1
Free—Peter Lusk, Yale	0:49.4
Free—Tom Winters, Southern California	2:02.1
Free—Dennis Rounsavelle, Southern Cali	4:24.5
Free—William Chase, Yale	17:48.7
Back—Charles Bittick, Southern California	0:54.4
Back—Charles Bittick, Southern California	2:00.1
Breast—Tom Petersen, Stanford	1:03.1
Breast—Ron Clark, Michigan	2:17.6
Butterfly—Mike Troy, Indiana	0:53.1
Butterfly—Mike Troy, Indiana	1:57.8
Medley—Lance Larson, Southern California	2:03.2
Freestyle relay—Southern California (Lance Bob Moulton, Don Redington, Jon Henricks)	3:18.5
Medley relay—Indiana (Frank McKinney, Mike Troy, Peter Sintz)	3:40.8
—Sam Hall, Ohio State	510.35 pts.
—Sam Hall, Ohio State	503.6 pts.
Southern California	87 pts.

Women's Indoor

(At Bartlesville, Okla.)

100-yd. free—Chris von Saltza, Santa Clara (Calif.) S. C.	0:56.3
250-yd. free—Chris von Saltza, Santa Clara (Calif.) S. C.	2:38.4
500-yd. free—Chris von Saltza, Santa Clara (Calif.) S. C.	5:37.7
100-yd. back—Lynn Burke, Santa Clara (Calif.) S. C.	1:03.0
200-yd. back—Lynn Burke, Santa Clara (Calif.) S. C.	2:16.7
100-yd. breast—Susan Rogers, Greenwood Memorial S. C., Gardner, Mass.	1:12.8
250-yd. breast—Susan Rogers, Greenwood Memorial S. C., Gardner, Mass.	3:14.6
100-yd. butterfly—Nancy Ramey, Washington A. C., Seattle	1:00.3
200-yd. butterfly—Becky Collins, Riviera Club, Indianapolis	2:16.9
400-yd. medley—Sylvia Ruuska, Berkeley, Calif.	4:57.0
400-yd. freestyle relay—Multnomah A. C., Portland, Oreg. (Noel Gabie, Joan Matich, Nancy Kanaby, Carolyn Wood)	3:51.5
400-yd. medley relay—Santa Clara (Calif.) S. C. (Lynn Burke, Ann Warner, Kathe Simceck, Chris von Saltza)	4:16.2
1-m. dive—Patsy Willard, Phoenix, Ariz.	339.55 pts.
3-m. dive—Irene MacDonald, Los Angeles A. C.	353.85 pts.
Team—Santa Clara (Calif.) S. C.	83 pts.

Women's Outdoor

(At Bartlesville, Okla.)

100-m. free—Chris von Saltza, Santa Clara (Calif.) S. C.	1:01.6
200-m. free—Chris von Saltza, Santa Clara (Calif.) S. C.	2:15.1
400-m. free—Chris von Saltza, Santa Clara (Calif.) S. C.	4:46.9
1,500-m. free—Carolyn House, Los Angeles A. C.	19:45.0
100-m. back—Lynn Burke, Santa Clara (Calif.) S. C.	1:10.2
200-m. back—Lynn Burke, Santa Clara (Calif.) S. C.	2:33.5
100-m. breast—Ann Warner, Santa Clara (Calif.) S. C.	1:23.4
200-m. breast—Ann Warner, Santa Clara (Calif.) S. C.	2:53.3
100-m. butterfly—Becky Collins, Riviera Club, Indianapolis	1:10.8
200-m. butterfly—Becky Collins, Riviera Club, Indianapolis	2:36.8
400-m. medley—Donna de Varona, Berkeley (Calif.) Y.M.C.A.	5:36.5
400-m. freestyle relay—Santa Clara (Calif.) S. C. (Kathe Simceck, Laural Watson, Debby Lee, Chris von Saltza)	4:21.8
400-m. medley relay—Santa Clara (Calif.) S. C. (Lynn Burke, Ann Warner, Kathe Simceck, Chris von Saltza)	4:49.1
3-m. dive—Patsy Willard, Dick Smith Swim Gym, Phoenix, Ariz.	381.1 pts.
Platform dive—Juno Stover Irwin, Los Angeles A. C.	83:13 pts.
Team—Santa Clara (Calif.) S. C.	95 pts.

Long Distance

Men (4 miles)—Roy Seari, El Segundo (Calif.) S. C.	1:26:45.3
Women (3 miles)—Donna Graham, Riviera Club, Indianapolis	1:11:07.3

WATER POLO

National A. A. U. Champions

Indoors—Illinois A. C.	
Outdoors—Toronto W. P. C.	

TABLE TENNIS

Source: Peter W. Roberts, National Chairman, History Committee, U. S. Table Tennis Association.

United States Championships

(At Washington, D. C.)

Singles—Martin Reisman, New York
 Doubles—Dan Vegh—Emery Lippai, Cleveland
 Women's singles—Sharon Acton, Wilmington, Calif.
 Women's doubles—Sharon Acton, Wilmington, Calif.—Valleri Smith, Los Angeles
 Mixed doubles—Bob Gusikoff, New York—Sharon Acton, Wilmington, Calif.
 Junior singles—Richard Card, Los Angeles
 Junior women's singles—Barbara Chaimson, Cheverly, Md.
 Midget singles—Ronald Hobson, Newport News, Va.
 Boys singles—Ronald Hobson, Newport News, Va.
 Senior singles—Sol Schiff, New York
 Senior doubles—Chuck Burns, Detroit—Bill Cross, Union, N. J.
 Esquire singles (men 50 years and over)—John McLennon, Canada

SQUASH RACQUETS

National Champions

Open—Roshan Khan, Pakistan
 Amateur—G. Diehl Mateer, Jr., Philadelphia
 Professional—Ray Widelksi, Canada
 Doubles—Howard Davis—Jim Whitmoyer, Philadelphia
 Team—Canada
 Intercollegiate—Steve Vehslage, Princeton
 Intercollegiate team—Princeton
 Veterans—Calvin MacCracken, Tenafly, N. J.

WOMEN

Singles—Margaret Varner, Wilmington, Del.
 Doubles—Mrs. Laussat Clement—Mrs. Charles Classen, Haverford, Pa.
 Senior singles—Mrs. Laussat Clement, Haverford, Pa.
 Senior doubles—Mrs. Laussat Clement, Haverford, Pa.—Mrs. John Bottinger, Cynwyd, Pa.

SQUASH TENNIS

U. S. singles—James Prigoff, New York
 U. S. veterans—David Smith, New York

RACQUETS

U. S. singles—Geoffrey Atkins, New York
 U. S. doubles—Tom Pugh—MacDonald Bailey, Great Britain
 Tuxedo Gold Racquets—Geoffrey Atkins, New York

COURT TENNIS

U. S. open—James Bostwick, New York
 U. S. amateur—Northrup Knox, Buffalo, N. Y.
 U. S. open doubles—James Dunn—William Forbes, Philadelphia
 U. S. amateur doubles—Alastair Martin—Robert Grant, 3d, New York
 Tuxedo Gold Cup—James Bostwick, New York

DOG SHOWS

Best in Show

Westminster Kennel Club (New York)—Ch. Chik T'Sun of Caversham, Pekingese, owned by Mr. and Mrs. C. C. Venable, Atlanta, Ga.
 International Kennel Club (Chicago)—Ch. Bianart Bewitching, Scotch terrier, owned by Mrs. Blanche E. Reeg, Waukegan, N. Y.
 Eastern Dog Club (Boston)—Ch. Bengal Sabu, airedale, owned by Barbara Strebeigh, Tuck Dell and Harold Florshiem, Birchanville, Pa.

BADMINTON

Source: Hans Rogind, National Publicity Chairman, American Badminton Association.

United States Championships

(At Chicago)

Singles—Tan Joe Hok, Indonesia
 Doubles—Finn Kobbero, Denmark—Charoen Wattana, Thailand
 Women's singles—Judith Devlin, Baltimore
 Women's doubles—Judith and Susan Devlin, Baltimore
 Mixed doubles—Finn Kobbero, Denmark—Margaret Valleri, Wilmington, Del.
 Senior doubles—Wayne Schell—Harry Seavey, Boston
 Women's senior doubles—Elinor Coombs—Thelma Burdick, Chicago

All-England

(At Wembley)

Singles—Erlend Kops, Denmark
 Doubles—Finn Kobbero—Poul-Erik Nielsen, Denmark
 Women's singles—Judith Devlin, Baltimore
 Women's doubles—Judith and Susan Devlin, Baltimore
 Mixed doubles—Finn Kobbero—Kirsten Thorndal, Denmark

Uber Cup

(At Philadelphia)

United States defeated Denmark, 5 to 2, in challenge round.

English Open

(At London)

Singles—Ian Harrison, Great Britain
 Doubles—John Leach—Michael Thornhill, Great Britain
 Women's singles—Agnes Simon, Netherlands
 Women's doubles—Diane Rowe—Kathie Best, Great Britain
 Mixed doubles—Ian Harrison—Diane Rowe, Great Britain

SYNCHRONIZED SWIMMING

Women's National A. A. U. Championships

INDOORS

(At West Palm Beach, Fla.)

Solo—Papsie Georgian, Athens Water Follies, Oakland, Calif.
 Stunt—Barbara Burke, University A. C., Hollywood, Calif.
 Duet—Susan Laurence—Jackie Vargas, Athens Water Follies, Oakland, Calif.
 Team—Athens Water Follies, Oakland, Calif. (Janet Anthony, Loretta Barriours, Sharon Gray, Susan Laurence, Jackie Vargas)

OUTDOORS

(At Hartford, Conn.)

Solo—Papsie Georgian, Athens Water Follies, Oakland, Calif.
 Duet—Susan Laurence—Jackie Vargas, Athens Water Follies, Oakland, Calif.
 Team—Athens Water Follies, Oakland, Calif. (Janet Anthony, Loretta Barriours, Sharon Gray, Susan Laurence, Jackie Vargas)

WATER SKIING

National Championships

(At Minneapolis)

Men—Chuck Stearns, Bellflower, Calif.
 Women—Norine Bardill, Ft. Lauderdale, Fla.

Bryar Wins Dog Sled Title

Keith Bryar, Center Harbor, N. H., won the 60-mile world championship sled dog derby at Laconia, N. H., in 1960. His elapsed time was 4 hours, 9 minutes, 10 seconds.

GOLF

U. S. Open Championship

(At Cherry Hills C.C., Denver)

Palmer, Ligonier, Pa.	72	71	72	65	280
Nicklaus, Columbus, Ohio.	71	71	69	71	282
Morrison, St. Louis.	74	70	70	69	283
Bradenton, Fla.	72	69	75	67	283
Forward, Tequesta, Fla.	71	69	70	73	283
Pross, Southern Pines, N. C.	73	69	68	73	283
Souchak, Grossinger, N. Y.	68	67	73	75	283
K, Los Angeles.	70	70	72	71	283
Barber, Los Angeles.	69	71	70	74	284
Barber, Fort Worth.	75	67	69	73	284
Barber, Wichita Falls, Tex.	70	71	71	72	284
Barber, Jr., Apple Valley, Calif.	71	70	73	72	286
Barber, Auburn, Mass.	73	70	72	71	286
Barber, Gleneagles, Ill.	72	72	73	69	286

—at 18 holes: Souchak (68), Barber and Henry (69); at 36: Souchak (135), Doug Sanders (138), and Barber and Fleck (140); at 54: Souchak (210), Barber and Finsterwald (210).

Other Champions

Barber—Kel Nagle, Australia.	278
Barber—Roberto de Vicenzo, Mexico.	275
Barber—G. A.—Jay Hebert, Lafayette, La.	281
Barber—Arnold Palmer, Ligonier, Pa.	282
Barber—Flory Van Donck, Belgium.	279
Barber—Art Wall Jr., Pocono Manor, Pa.	269
Barber—Gene Littler, Singing Hills, Calif.	273
Barber—Stan Leonard, Canada.	*278
Barber—Pro—Dick Metz, New Orleans (match play)	
Barber—Dick Metz, New Orleans.	284

a playoff.

Other P. G. A. Winners

Open—Dow Finsterwald, Tequesta, Fla.	280
Open—Jerry Barber, Los Angeles.	278
Open—National—Ken Venturi, San Francisco.	286
Open—Mike Souchak, Grossinger, N. Y.	269
Open—Desert Classic—Arnold Palmer, Ligonier, Pa.	†338
Open—Jack Fleck, Los Angeles.	*273
Open—Ernie Vossler, Fort Worth.	269
Open—Don January, Denver.	271
Open—Pete Cooper, Lakeland, Fla.	287
Open—Arnold Palmer, Ligonier, Pa.	276
Open—Joe Jimenez, Manhattan, Kan.	*280
Open—Arnold Palmer, Ligonier, Pa.	279
Open—Pete Cooper, Lakeland, Fla.	283
Open—Arnold Palmer, Ligonier, Pa.	273
Open—George Bayer, Gleneagles, Ill.	*282
Open—Sam Snead, White Sulphur Springs, W. Va.	276
Open—Tom Nieporte, Bronxville, N. Y.	277
Open—Snead Open—Sam Snead, White Sulphur Springs, W. Va.	270
Open—Dow Finsterwald, Tequesta, Fla.	270
Open—Bill Collins, Crystal River, Fla.	*280
Open—of Champions—Jerry Barber, Los Angeles	268
Open—Julius Boros, Southern Pines, N. C.	280
Open—Bill Collins, Crystal River, Fla.	275
Open—Festival—Dave Marr, Houston.	285
Open—Doug Ford, Crystal River, Fla.	270
Open—Tommy Bolt, Crystal River, Fla.	*273
Open—Gene Littler, Singing Hills, Calif.	273
Open—Mike Souchak, Grossinger, N. Y.	282
Open—Arnold Palmer, Ligonier, Pa.	*270
Open—Don Fairfield, Jacksonville, Ill.	266
Open—Ken Venturi, Palo Alto, Calif.	271
Open—Johnny Pott, Shreveport, La.	*275
Open—Billy Johnson, Provo, Utah.	262
Open—Ernie Vossler, Midland, Tex.	272
Open—Bill Casper, Jr., Apple Valley, Calif.	266
Open—Bill Casper, Jr., Apple Valley, Calif.	275
Open—Bill Casper, Jr., Apple Valley, Calif.	276
Open—playoff.	† 90 holes.

Amateur

U. S.—Deane Beman, Silver Spring, Md. (defeated Bob Gardner, New York in Final 6 and 4)	
British—Joe Carr, Ireland (defeated Bob Cochran, St. Louis, in final, 8 and 7)	
French—Henri de Lamaze, France (defeated John Dawson, Palm Desert, Calif., in final, 3 and 2)	
Canadian—Keith Alexander, Canada	
Eastern—Deane Beman, Silver Spring, Md.	
Western—Tommy Aaron, Gainesville, Ga.	
Southern—Charles Smith, Gastonia, N. C.	
North and South—Charles Smith, Gastonia, N. C.	
Trans-Mississippi—Deane Beman, Silver Spring, Md.	
Colonial Invitation—Jack Nicklaus, Columbus, Ohio	
National Collegiate A. A.—Dick Crawford, Houston	
U. S. public links—Vern Callison, Sacramento, Calif.	
U. S. senior—Mike Cestone, Jamesburg, N. J.	
U. S. junior—Bill Tindall, Seattle	
U. S. pee wee—Charles McDowell, Virginia Beach, Va.	

WOMEN

U. S. Open Championships

(At Worcester C. C., Worcester, Mass.)

Betsy Rawls, Spartanburg, S. C.	76	73	68	75	292
Joyce Ziske, Waterford, Wis.	75	74	71	73	293
Mary Lena Faulk, Sea Island, Ga.	75	72	76	75	298
Marlene Bauer Hagge, Crystal River, Fla.	74	74	75	75	298
Mickey Wright, San Diego, Calif.	71	71	75	82	299
Wiffi Smith, St. Clair, Mich.	75	76	73	76	300
Beverly Hanson, Palm Desert, Calif.	75	77	77	72	301
Fay Crocker, Uruguay.	74	76	76	76	302
Louise Suggs, Sea Island, Ga.	78	77	72	77	304
Marilynn Smith, French Lick, Ind.	72	72	83	77	304
Kathy Whitworth, New York.	75	73	80	76	304
Barbara Romack, Sacramento, Calif.	80	78	73	75	306
Ruth Jessen, Seattle.	76	77	78	75	306
Muriel MacKenzie, Webster, N. Y.	75	80	76	76	308

Other Champions

National P. G. A.—Mickey Wright, San Diego, Calif.	292
Titleholders—Fay Crocker, Uruguay.	303
Triangle Round Robin—Louise Suggs, Sea Island, Ga.	59 pts.
Western Open—Joyce Ziske, Waterford, Wis.	*301
Babe Zaharias Open—Betsy Rawls, Spartanburg, S. C.	211
American Ladies Open—Patty Berg, St. Andrew's, Ill.	292
Canadian Open—Judy Darling, Canada (match play)	

* Won in playoff.

Amateur

U. S.—JoAnne Gunderson, Kirkland, Wash. (defeated Jean Ashley, Chanute, Kans., in Final, 6 and 5)	
British—Barbara McIntire, Lake Park, Fla. (defeated Philomena Garvey, Ireland, in final, 4 and 2)	
French—Claudine Cros, France	
Eastern—Mrs. Philip Cudone, Bloomfield, N. J.	
Western—Ann Casey Johnstone, Mason City, Iowa	
Southern—Judy Eller, Old Hickory, Tenn.	
North and South—Barbara McIntire, Lake Park, Fla.	
Trans-Mississippi—Sandra Haynie, Austin, Tex.	
National intercollegiate—JoAnne Gunderson, Arizona State	
U. S. senior—Mrs. Edwin H. Vore, Jr., Bryn Mawr, Pa.	
U. S. junior—Carol Sorenson, Janesville, Wis.	

TEAM

Curtis Cup (women)—United States 6½, Great Britain 2½, at Lindrick, England	
Americas Cup—United States 21½, Canada 20, Mexico 12½	
National Collegiate—Houston	
U. S. Public Links—Pasadena, Calif.	
Canada Cup—United States	
World Amateur—United States	

ROWING

Source: William J. Harahan III, Public Relations Officer, National Association of Amateur Oarsmen; Editor, Rowing News and Rowing Guide.

Intercollegiate Rowing Association

(At Syracuse, N. Y.)

Varsity (4 miles)—1, California (15:57); 2, Navy (16:02.2); 3, Washington (16:03.6); 4, Brown; 5, Cornell and Pennsylvania (tie); 7, Dartmouth and Rutgers (tie); 9, Syracuse; 10, Princeton; 11, Wisconsin; 12, Columbia.	
Junior Varsity (3 miles)—Cornell.....	16:12.0
Freshman (2 miles)—Navy.....	10:45.7
Team (Ten Eyck Trophy)—Navy	

Other Intercollegiate Regattas

Adams Cup (1 5/16 miles)—Pennsylvania.....	6:18.6
Blackwell Cup (2 miles)—Pennsylvania.....	11:42.0
Carnegie Cup (2 miles)—Cornell.....	10:04.2
Childs Cup (1 3/4 miles)—Pennsylvania.....	8:43.1
Compton Cup (1 3/4 miles)—Harvard.....	8:35.9
Dad Vail Trophy (2,000 meters)—Brown.....	6:35.5
Eastern Association championship (2,000 meters)—Cornell.....	6:33.5
Goes Trophy (3/4 mile)—Navy.....	*3:39.0
Harbach Cup (2 miles) Stanford.....	11:18.0
Harvard-Yale (4 miles)—Harvard.....	19:41.0
Oxford-Cambridge (4 1/4 miles)—Oxford.....	18:59.0
Packard Trophy (2 miles)—Syracuse.....	10:22.0
Pennsylvania-Cornell (2 miles)—Pennsylvania.....	10:00.4
Washington-California (3 miles)—Washington.....	15:04.0
Western intercollegiate championship (2,000 meters)—California.....	6:21.3

* Race shortened to 5/8 mile because of weather.

United States Championships

(At Syracuse, N. Y., and Philadelphia)
2,000 meters, except dashes

Single sculls—Harry Parker, Vesper B. C., Philadelphia	8:25.2
Double sculls—Jack Kelly, Jr.—Bill Knecht, Vesper B. C., Philadelphia.....	8:00.3
Pairs—Ted Frost—Bob Rogers, Lake Washington R. C., Seattle.....	7:12.6
Pairs with coxswain—Dick Draeger—Conn Finlay and Kent Mitchell, Lake Washington R. C., Seattle.....	8:37.7
Fours—Lake Washington R. C., Seattle.....	7:16.2
Fours with coxswain—Lake Washington R. C., Seattle.....	7:12.6
Eights—U. S. Naval Academy.....	6:46.0
1/4-mi. dash—Bill Knecht, Vesper B. C., Philadelphia	1:28.0
Association singles—Wayne Frye, Potomac B. C., Washington, D. C.....	7:13.8
Quadruple sculls—Undine Barge Club, Philadelphia.....	6:34.5
Intermediate eights—Vesper B. C., Philadelphia.....	6:14.6
150-lb. 1/4-mi. dash—Bob Houston, New York A. C.....	1:26.8
150-lb. singles—Jim Barker, Undine Barge Club, Philadelphia.....	9:22.8
150-lb. doubles—Joe Mastalski—Ed Pressman, Undine Barge Club, Philadelphia.....	8:32.8
150-lb. quadruple sculls—Undine Barge Club, Philadelphia.....	6:33.0
150-lb. fours—New York A. C.....	6:58.7
150-lb. eights—Detroit B. C.....	7:12.0
Team (Barnes Trophy)—Vesper B. C., Philadelphia 89 3/4 pts.	

British Royal Henley

(At Henley-on-Thames, England—1 5/16 miles)

Grand Challenge Cup (eights)—Molesey B. C., England	6:35
Thames Challenge Cup (lightweight eights)—Harvard.....	6:47
Diamond Sculls (singles)—Stuart MacKenzie, Australia	8:03
Double sculls—G. C. Justicz—N. J. Birkmyre, England.....	7:17
Silver Goblets (pairs)—I. L. Elliott—D. C. Rutherford, England.....	7:58
Stewards Cup (fours)—Barn Cottage, England.....	7:10

FENCING

Source: Amateur Fencing League of America

United States Championships

(At New York)

Foil—Albert Axelrod, Salle Santelli, New York
Epee—David Micahnik, Salle Csiszar, Philadelphia
Saber—Eugene Hamori, Salle Csiszar, Philadelphia
Women—Janice Lee Romary, Tarzana, Calif.

TEAM

Foil—New York A. C. (Silvio Giolito, Karl Haaf, Jack Epee—U. S. Navy (James Margolis, Al Morales, Wommack)
Saber—Pannonia A. C., San Francisco (Gerard B. Tomas Orley, Alex Orban)
3-weapon—New York A. C. (Jack Keane, Ralph Sp. Cheba Pallaghy)
Women—Salle LucLa, New York (Averil Genton, Harriett Prudence Schwabe)
Overall (Martini & Rossi Trophy)—New York A. C.

National Collegiate A. A.

(At Champaign, Ill.)

Foil—Gene Glazer, New York University
Epee—Gil Eisner, New York University
Saber—Mike Dasaro, New York University
Team—New York University (Gene Glazer, Gil Eisner, Dasaro)

Intercollegiate Association

(At Bronx, N. Y.)

Individual
Foil.....Gene Glazer, N. Y. U. N. Y.
Epee.....Fred Anger, Princeton Princeton
Saber.....Mike Dasaro, N. Y. U. Columbia
Three-weapon.....N. Y.

Women's Intercollegiate Association

(At Elmira, N. Y.)

Individual—Madeline Miyamoto, Fairleigh Dickinson
Team—Fairleigh Dickinson

LACROSSE

Source: Jack Kelley, Editor, *The Lacrosse News*, Bay Shore, N. Y.

National Champions

Intercollegiate—Navy
Open—Mt. Washington, Baltimore
North-South game—South 13, North 12, at Worcester, Mass.

All-America Selections

FIRST TEAM—Goal: Edward Nippard, Baltimore. Defense: Jack Horton, Princeton; Jon McNealey, Johns Hopkins; William Carpenter, Army. Midfield: David Dresser, Cornell; Hal Eubanks, Army; Richard Pariseau, Navy. Attack: Howard Albrecht, Baltimore; Karl Rippelmeyer, Navy; Bob Miser, Army.

HORSESHOE PITCHING

World Championships

(At Muncie, Ind.)

Men—Don Titcomb, Los Gatos, Calif.
Women—Esta McKee, Royal Center, Ind.

National A. A. U. Championship

Men—Glen Riffle, Dayton, Ohio

Lee Retains U. S. Billiards Crown

Edward Lee of the New York A.C. won the national amateur three-cushion billiard championship for the third consecutive year in 1960.

TENNIS

United States Championships

Forest Hills, N. Y., and Brookline, Mass.)
Neale Fraser, Australia (defeated Rod Laver, Australia, in final, 6-4, 6-4, 10-8)
Roy Emerson-Neale Fraser, Australia
Singles—Darlene Hard, Montebello, Calif. (defeated Bueno, Brazil, in final, 6-3, 10-12, 6-4)
Doubles—Darlene Hard, Montebello, Calif.—Maria Bueno, Brazil
Singles—Neale Fraser, Australia—Margaret Osborne, Wimbledon, Del.

England

(At Wimbledon)

Neale Fraser, Australia (defeated Rod Laver, Australia, in final, 6-4, 3-6, 9-7, 7-5)
Dennis Ralston, Bakersfield, Calif.—Rafael Osuna, Mexico
Singles—Maria Bueno, Brazil (defeated Sandra Pines, South Africa, in final, 8-6, 6-0)
Doubles—Darlene Hard, Montebello, Calif.—Maria Bueno, Brazil
Singles—Rod Laver, Australia—Darlene Hard, Montebello, Calif.

France

(At Paris)

Cola Pietrangeli, Italy (defeated Luis Ayala, Chile, in final, 6-3, 6-4, 4-6, 6-3)
Roy Emerson-Neale Fraser, Australia
Singles—Darlene Hard, Montebello, Calif. (defeated Pines, Mexico, in final, 6-3, 6-4)
Doubles—Darlene Hard, Montebello, Calif.—Maria Bueno, Brazil
Singles—Robert Howe, Australia—Maria Bueno, Brazil

Australia

(At Brisbane)

Rod Laver, Australia (defeated Neale Fraser, Australia, in final, 5-7, 3-6, 6-3, 8-6)
Rod Laver-Bob Mark, Australia
Singles—Margaret Smith, Australia (defeated Jan Pasarek, Australia, in final, 7-5, 6-2)
Doubles—Christine Truman, Great Britain—Maria Bueno, Brazil
Singles—Trevor Fancutt, South Africa—Jan Lehane, Australia

S. Clay Court Championships

(At River Forest, Ill., and St. Louis)

Harry MacKay, Dayton, Ohio
Bob Hewitt—Marty Mulligan, Australia
Singles—Dorothy Head Knodel, Panama City
Doubles—Darlene Hard, Montebello, Calif.—Billie Jean King, Long Beach, Calif.
Singles—Bryan Grant, Atlanta, Ga.
Singles—Bryan Grant—Larry Shippey, Atlanta, Ga.
Singles—Ward and Jimmy Parker, St. Louis

U. S. Indoor Championships

(At New York and Brookline, Mass.)

Harry MacKay, Dayton, Ohio
Luis Ayala—Manuel Santana, Spain
Singles—Carole Wright, Brooklyn
Doubles—Ruth Jeffrey, Melrose, Mass.—Mrs. Richard Cheney, Mass.
Singles—Donald Manchester, Auburndale, Fla.—Lois Pines, Conn.
Singles—Gardner Mulloy, Coral Gables, Fla.
Singles—Robert Hagey, Wilmette, Ill.—Frank Thompson, U.S.

Other United States Champions

National Collegiate singles—Larry Nagler, U.C.L.A.
National Collegiate doubles—Larry Nagler—Allen Fox, U.C.L.A.
Public Parks singles—Johnny Evans, Louisville, Ky.
Senior singles—Gardner Mulloy, Coral Gables, Fla.
Senior doubles—Adrian Quist, Australia—Jean Borotra, France
Junior singles—Bill Lenoir, Tucson, Ariz.
Junior doubles—Bill Lenoir, Tucson, Ariz.—Frank Froehling, Coral Gables, Fla.
Interscholastic singles—Bill Lenoir, Tucson (Ariz.) H. S.
Interscholastic doubles—Bill Lenoir—Hal Lowe, Tucson (Ariz.) H. S.
Boys singles—Mike Belkin, Miami Beach, Fla.
Boys doubles—Mickey 'Schad, Louisville, Ky.—Nick Kalo, Costa Rica
Boys singles (13 and under)—Bill Harris, West Palm Beach, Fla.
Boys doubles (13 and under)—Roy Barth, San Diego, Calif.—John Sanderlin, El Cajon, Calif.
Boys singles (11 and under)—Zan Guerry, Chattanooga
Boys doubles (11 and under)—Zan Guerry, Chattanooga—Don Lutz, Los Angeles
Father-and-son—Harry and Harry Jr. Hoffman, Philadelphia

WOMEN

College girls singles—Linda Vail, Oakland City College
College girls doubles—Linda Vail, Oakland City College—Susan Butt, British Columbia
Public Parks singles—Joan Johnson, Los Angeles
Senior singles—Charlotte Lee, Short Hills, N. J.
Senior doubles—Kay McKean, Hamilton, Mass.—Mrs. Richard Buck, Manchester, Mass.
Girls singles (18 and under)—Karen Hantze, San Diego, Calif.
Girls doubles (18 and under)—Karen Hantze, Katherine Chabot, San Diego, Calif.
Girls singles (15 and under)—Julie Heldman, New York
Girls doubles (15 and under)—Patty Barth, San Diego, Calif.—Margaret Taylor, San Marino, Calif.
Girls singles (13 and under)—Peaches Bartkowicz, Hamtramck, Mich.
Girls doubles (13 and under)—Vicki Holmes, Melbourne, Fla.—Gloria Jean Sullivan, St. Petersburg, Fla.
Girls singles (11 and under)—Peaches Bartkowicz, Hamtramck, Mich.
Girls doubles (11 and under)—Peaches Bartkowicz, Hamtramck, Mich.—Judy Dixon, Montclair, N. J.

Team

Wightman Cup (women)—England defeated United States, 4 to 3, at Wimbledon, England
National Collegiate A. A.—U.C.L.A.
National girls—Southern California

ARCHERY

National Archery Assn. Championships

(At Oxford, Ohio)

Men—Robert Kadlec, Rochester, Minn.....	3,486
Women—Ann Clark, Cincinnati.....	3,845
Men's team—Pennsylvania.....	2,883
Women's team—Greene Archers.....	2,555

National Field Archery

(At Grayling, Mich.)

Freestyle—James W. Mackey, Bradford, Pa.....	2,998
Instinctive—Fred Simmons, Houston, Tex.....	2,771
Heavy tackle—Zell M. Wyman, Ionia, Mich.....	2,772

WOMEN

Freestyle—Cleo Roberson, Samaria, Mich.....	2,564
Instinctive—Faye Sconyers, Modesto, Calif.....	2,447
Heavy tackle—Anna Van Dolson, Vallejo, Calif.....	1,747

XVII OLYMPIC GAMES CHAMPIONS

(At Rome, Italy, Aug. 25-Sept. 11)

TRACK AND FIELD

100 m.—Armin Hary, Germany.....	0:10.2
200 m.—Livio Berutti, Italy.....	0:20.5
400 m.—Otis Davis, United States.....	0:44.9
800 m.—Peter Snell, New Zealand.....	1:46.3
1,500 m.—Herb Elliott, Australia.....	3:35.6
5,000 m.—Murray Halberg, New Zealand.....	13:43.4
10,000 m.—Peter Bolotnikov, U.S.S.R.....	28:32.2
Marathon—Abebe Bikila, Ethiopia.....	2:15:16.2
3,000-m. steeplechase—Zdzislaw Kryszowiak, Poland.....	8:34.2
20,000-m. walk—Vladimir Golubnich, U.S.S.R.....	1:34:07.2
50,000-m. walk—Donald Thompson, Great Britain.....	4:25:30.0
110-m. high hurdles—Lee Calhoun, United States.....	0:13.8
400-m. hurdles—Glenn Davis, United States.....	0:49.3
400-m. relay—Germany (Bernd Cullman, Armin Hary, Walter Mahlendorf, Martin Lauer).....	0:39.5
1,600-m. relay—United States (Jack Yerman, Earl Young, Glenn Davis, Otis Davis).....	3:02.2
High jump—Robert Shavlakadze, U.S.S.R.....	7 ft. 1 in.
Broad jump—Ralph Boston, United States.....	26 ft. 7 3/4 in.
Hop, step and jump—Jozsef Schmidt, Poland.....	55 ft. 1 1/2 in.
Pole vault—Don Bragg, United States.....	15 ft. 5 1/2 in.
Shot put—Bill Nieder, United States.....	64 ft. 6 1/2 in.
Discus—Al Oerter, United States.....	194 ft. 2 in.
Javelin—Viktor Tsubulenko, U.S.S.R.....	277 ft. 8 1/2 in.
Hammer—Vasily Rudenkov, U.S.S.R.....	220 ft. 2 in.
Decathlon—Rafer Johnson, United States.....	8,392 pts.

WOMEN

100 m.—Wilma Rudolph, United States.....	0:11.0
200 m.—Wilma Rudolph, United States.....	0:24.0
800 m.—Ljudmila Shevcova, U.S.S.R.....	2:04.3
80-m. hurdles—Irina Press, U.S.S.R.....	0:10.8
400-m. relay—United States (Martha Hudson, Lucinda Williams, Barbara Jones, Wilma Rudolph).....	0:44.5
High jump—Iolanda Balas, U.S.S.R.....	6 ft. 3/4 in.
Broad jump—Vera Krepkina, U.S.S.R.....	20 ft. 10 1/2 in.
Shot put—Tamara Press, U.S.S.R.....	56 ft. 9 1/2 in.
Discus—Nina Ponomareva, U.S.S.R.....	180 ft. 8 1/2 in.
Javelin—Elvira Ozolina, U.S.S.R.....	183 ft. 8 in.

BOXING

Flyweight—Guyle Torok, Hungary
Bantamweight—Oleg Grigoryev, U.S.S.R.
Featherweight—Francesco Musso, Italy
Lightweight—Kazmirierz Pazdzior, Poland
Light welterweight—Bohumil Nemecek, Czechoslovakia
Welterweight—Giovanni Benvenuti, Italy
Light middleweight—Wilbert McClure, United States
Middleweight—Eddie Crook, United States
Light heavyweight—Cassius Clay, United States
Heavyweight—Francesco de Piccoli, Italy

CANOEING

KAYAK

1,000-m. singles—Erik Hansen, Denmark.....	3:53.00
1,000-m. tandem—Gert Fredricsson-Sven Sjodellius, Sweden.....	3:34.73
2,000-m. relay—Germany (Dieter Krause, Gunther Perleberg, Paul Lange, Friedhelm Wentzke).....	7:39.43
Women's 500-m. singles—Antonina Seredina, U.S.S.R.....	2:08.08
Women's 500-m. tandem—Maria Shubina-Antonina Seredina, U.S.S.R.....	1:54.76

CANADIAN

1,000-m. singles—Glanos Parti, Hungary.....	4:33.90
1,000-m. tandem—Sergey Marerenko-Leonid Geyshter, U.S.S.R.....	4:17.94

CYCLING

1,000-m. sprint—Sante Gaiordoni, Italy	
1,000-m. time trial—Sante Gaiordoni, Italy.....	19
2,000-m. tandem—Giuseppe Beghetto-Sergio Bianchetto, Italy	
4,000-m. team pursuit—Italy.....	4
Road race (17.5 kilo.)—Viktor Kapitonov, U.S.S.R.....	4:20
Team road race (100 kilo.)—Italy.....	2:14

EQUESTRIAN

3-day event—Lawrence Morgan, Australia	7.15 bonus
3-day event, team—Australia.....	128.18 penalty
Jumping—Raimondo d'Inzeo, Italy.....	12 1/2
Jumping, team—Germany.....	46 1/2 penalty
Dressage—Sergei Filatov, U.S.S.R.....	2,144

FENCING

Foil—Viktor Zdanovich, U.S.S.R.....	Team—U.S.
Epee—Giuseppe Delfino, Italy.....	Team—Italy
Saber—Rudolph Karpati, Hungary.....	Team—Hungary
Women's foil—Adelheid Schmid, Germany.....	Team—U.S.

GYMNASTICS

All-around—Boris Shakhlin, U.S.S.R.....	115
Free standing—Nobuyuki Aihara, Japan.....	19
Long horse—Takashi Ono, Japan, and Boris Shakhlin, U.S.S.R. (tie).....	19
Side horse—Eugen Ekman, Finland, and Boris Shakhlin, U.S.S.R. (tie).....	19
Parallel bars—Boris Shakhlin, U.S.S.R.....	19
Horizontal bar—Takashi Ono, Japan.....	19
Flying rings—Albert Asarian, U.S.S.R.....	19
Team—Japan.....	575

WOMEN

All-around—Larisa Latynina, U.S.S.R.....	77
Free standing—Larisa Latynina, U.S.S.R.....	19
Long horse—Margarita Nikolaeva, U.S.S.R.....	19
Balance beam—Eva Bosakova, Czechoslovakia.....	19
Uneven parallel bars—Polina Astakhova, U.S.S.R.....	19
Team—U.S.S.R.....	382

MODERN PENTATHLON

Individual—Ferenc Nemeth, Hungary.....	5:1
Team—Hungary.....	14:1

ROWING

(2,000 meters)

Single sculls—Vyacheslav Ivanov, U.S.S.R.....	7:13
Double sculls—Vaclav Kozak-Pavel Schmidt, Czechoslovakia.....	6:47
Pairs—Valentin Boreiko-Oleg Golovanov, U.S.S.R.....	7:02
Pairs with coxswain—Bernhard Knubel-Heinz Renneberg and Klaus Zerta, Germany.....	7:30
Fours—United States (Lake Washington R. C. Seatttle)—Art Ayrault, Ted Nash, Dick Wailes, John Sayre).....	5:26
Fours with coxswain—Germany.....	6:39
Eights—Germany.....	5:57

SHOOTING

Free rifle—Hubert Hammerer, Austria.....	1,1
Free pistol—Alexei Gustchin, U.S.S.R.....	9
Trapshooting—Ion Dumitrescu, Rumania.....	15

rifle, prone—Peter Kohnke, Germany	590
rifle, three-position—Viktor Shanburkin,	
.....	1,149
pistol—Bill McMillan, United States	*587
n shoot-off.	

SWIMMING

—John Devitt, Australia	0:55.2
—Murray Rose, Australia	4:18.3
—Jon Konrads, Australia	17:19.6
—Dave Thiele, Australia	1:01.9
—Bill Mulliken, United States	2:37.4
—Mike Troy, United States	2:12.8
—style relay—United States (George Harri-	
—Blick, Mike Troy, Jeff Farrell)	8:10.2
—style relay—United States (Frank McKin-	
—Hait, Lance Larson, Jeff Farrell)	4:05.4
—dive—Gary Tobian, United States	170 pts.
—Bob Webster, United States	165.56 pts.

WOMEN

—Dawn Fraser, Australia	1:01.2
—Chris von Saltza, United States	4:50.6
—Lynn Burke, United States	1:09.3
—Anita Lonsbrough, Great Britain	2:49.5
—Carolyn Schuler, United States	1:09.5
—style relay—United States (Joan Spillane,	
—Tobs, Carolyn Wood, Chris von Saltza)	4:08.9
—United States (Lynn Burke, Patty	
—Carolyn Schuler, Chris von Saltza)	4:41.1
—dive—Ingrid Kramer, Germany	155.81 pts.
—Ingrid Kramer, Germany	91.28 pts.

WEIGHTLIFTING

	Lbs.
—Charles Vinci, United States	760½
—Yevgeni Minaev, U.S.S.R.	821
—Viktor Bushuev, U.S.S.R.	876

Middleweight—Alexander Kurynov, U.S.S.R.	964½
Light heavyweight—Ireneusz Palinski, Poland	975½
Middle heavyweight—Arkadi Vorbiev, U.S.S.R.	1,039½
Heavyweight—Yuri Vlasov, U.S.S.R.	1,182½

WRESTLING

FREE STYLE

Flyweight—Ahmet Bilek, Turkey	
Bantamweight—Terry McCann, United States	
Featherweight—Mustafa Dagistanli, Turkey	
Lightweight—Shelby Wilson, United States	
Welterweight—Doug Blubaugh, United States	
Middleweight—Hasan Gungor, Turkey	
Light heavyweight—Ismet Atli, Turkey	
Heavyweight—Wilfried Dietrich, Germany	

GRECO-ROMAN

Flyweight—Dumitru Pirvulescu, Rumania	
Bantamweight—Oleg Karavaev, U.S.S.R.	
Featherweight—Muzahir Sille, Turkey	
Lightweight—Avtandil Koridze, U.S.S.R.	
Welterweight—Mithat Bayrak, Turkey	
Middleweight—Dimitrio Dobrev, Bulgaria	
Light heavyweight—Teufik Kis, Turkey	
Heavyweight—Ivan Bogdan, U.S.S.R.	

YACHTING

	Pts.
5.5 meter—George O'Day, United States	6,900
Star—Timir Pinegin, U.S.S.R.	7,619
Dragon—Crown Prince Constantine, Greece	6,733
Flying Dutchman—Peder Lunde, Norway	6,774
Finn monotype—Paul Elvstrom, Denmark	8,171

OTHER TEAM SPORTS

Basketball—United States	
Field hockey—Pakistan	
Soccer—Yugoslavia	
Water polo—Italy	

VIII OLYMPIC WINTER GAMES

(At Squaw Valley, Calif., Feb. 18-28)

FIGURE SKATING

	Pts.
Jenkins, United States	1440.2
ol Heiss, United States	1490.1
t Paul-Barbara Wagner, Canada	80.4

50,000-m. cross-country—Kalevi Hamalainen,	
Finland	2:59:06.3
40,000-m. cross-country relay—Finland (Alatalo	
Toimo, Eero Mantyrants, Vaino Huhtala,	
Voikka Hakulinen)	2:18:45.6

ICE HOCKEY

Standing, Championship Round

	W	L	T	For	Agst	Pts.
.....	5	0	0	29	11	10
.....	4	1	0	31	12	8
.....	2	2	1	24	19	5
.....	2	3	0	21	23	4
.....	1	3	1	19	19	3
.....	0	5	0	5	45	0

WOMEN

Slalom—Anne Heggteit, Canada	1:49.6
Giant slalom—Yvonne Ruegg, Switzerland	1:39.9
Downhill—Heidi Bibl, Germany	1:37.6
10,000-m. cross-country—Marija Gusakova,	
U.S.S.R.	39:46.6
15,000-m. cross-country relay—Sweden (Irma	
Hohansson, Britt Strandberg, Sonja Ruth-	
strom)	1:04:21.4

SPEED SKATING

500-m.—Eugeny Grishin, U.S.S.R.	0:40.2
1,500-m.—Eugeny Grishin, U.S.S.R., and Roald	
Edgar Aas, Norway (tie)	2:10.4
5,000-m.—Viktor Kosichkin, U.S.S.R.	7:51.3
10,000-m.—Knut Johannesen, Norway	15:46.6

WOMEN

500-m.—Helga Haase, Germany	0:45.9
1,000-m.—Klara Guseva, U.S.S.R.	1:34.1
1,500-m.—Lidiya Skoblikova, U.S.S.R.	2:25.2
3,000-m.—Lidiya Skoblikova, U.S.S.R.	5:14.3

SKIING

—Hinterseer, Austria	2:08.9
—Roger Staub, Switzerland	1:48.3
—an Vuarnet, France	2:06.0
—mut Recknagel, Germany	227.2 pts.
—ed—Georg Thoma, Germany	457.952 pts.
—s Lestander, Sweden	1:33:21.6
—ss-country—Hakon Brusveen,	
	50:55.5
—ss-country—Sixten Jernberg,	
	1:51:03.9

YACHTING

Ocean and Distance Racing

San Diego to Acapulco (1,430 miles)—Pursuit, Howard Ahmanson, Beverly Hills, Calif.
 Miami to Nassau (184 miles)—Tigress, James Rider, Lake Miami to St. Petersburg (372 miles)—Solution, Thor H. Ramsing, Greenwich, Conn.
 Southern Ocean Racing Conference—Solution, Thor H. Ramsing, Greenwich, Conn.
 Newport to Bermuda (635 miles)—Finisterre, Carleton Mitchell, New York
 Chicago to Mackinac (330 miles)—Freebooter, Mac and Bob Pohn, Chicago.
 Port Huron to Mackinac (250 miles)—X-Touche, Jerry Clements and Clarence Baker, Detroit
 Trans-Atlantic (Plymouth, England, to New York, solo, 3,000 miles)—Gipsy Moth III, Francis Chichester, England
 Trans-Atlantic (Bermuda to Sweden, 3,500 miles)—Figaro, W. T. Snaith, Weston, Conn.

Other Champions

North American sailing (Mallory Cup)—Harry Melges, Jr., Lake Geneva, Wis.
 Junior North American sailing (Sears Cup)—David Miller, Canada
 Women's North American sailing (Adams Cup)—Pat Duane, Delray Beach, Fla.
 National intercollegiate dinghy—Coast Guard Academy
 Women's national intercollegiate dinghy—Carolyn Dorrance, Mount Holyoke
 National interscholastic sailing—Andover
 Atlantic, national—Briggs Cunningham, Greens Farms, Conn.
 Blue Jay, international—Pete Gonzalez, Manhasset, N. Y.
 Comet, international—John MacCausland, Collingswood, N. J.
 Dragon, world—Ole Berntsen, Denmark
 E Boat, national—Gordon Lindemann, Pine Lake, Wis.
 5-0-5, North American—Henry Scheffer, Mamaronock, N. Y.
 5.5 meter, national—Ernest B. Fay, Houston, Tex.
 Flatte, world—Dave Miller, Canada
 Flying Dutchman, North American—Frank Levinson, Clearwater, Fla.
 Flying Scot, national—Gordon Douglass, Oakland, Md.
 Highlander, national—Richard Farkas, Perth Amboy, N. J.
 International One Design, world—Fred Olsen, Norway
 Jet 14, national—Calvin Engle, Island Heights, N. J.
 Lido 14, world—Harry Wood, Alamitos Bay, Calif.
 Lightning, international—Carl M. Eichenlaub, San Diego, Calif.
 Luders 16, international—G. Shelby Friedrichs, Jr., New Orleans
 Moth, national—Ken Klare, Miami, Fla.
 One-Ten, international—Albert Frost, San Diego, Calif.
 Penguin, national—Gardner Cox, Philadelphia
 Raven, national—Timothea Schneider, Oyster Bay, N. Y.
 Rebel, national—Clark Lankton, Cincinnati
 Rhodes Bantam, national—Dick Besse, Skaneateles, N. Y.
 Sailfish, national—John Korkosz, Schenectady, N. Y.
 6-Meter, North American—James C. Crang, Canada
 Snipe, national—Harry Levinson, Indianapolis
 Star, North American—Richard Stearns, Northfield, Ill.
 Thistle, national—Bruce Goldsmith, Racine, Wis.
 Tiger Cat, national—William S. Cox, Darien, Conn.
 Turnabout, national—Mike Lewenberg, Plymouth, Mass.
 Two-Ten, international—Morton S. Bromfield, Canton, Mass.
 Windmill, international—Jeff Fortune, Boca Ciega, Fla.
 Wood Pussy, national—Borden Hance, Fair Haven, N. J.
 Y-Flyer, national—Dave Blackshear, Atlanta, Ga.

U. S. Wins Tuna Tournament

The United States team captured the third annual Bahamas international tuna match in 1960, totaling 2,055 pounds landed in the five-day meet at Cat Cay.

MOTORBOATING

Major Trophy Winners

Harmsworth Trophy—Miss Supertest III, driven by Hayward, owned by James G. Thompson, Canada
 Silver Cup—Nitrogen Too, driven by Ron Musson, owned by Samuel duPont, Wilmington, Del.
 President's Cup—Miss Detroit, owned and driven by Thompson, Detroit
 Seafair Trophy—Miss Thriftway, driven by Bill Munn, owned by Willard Rhodes, Seattle
 Detroit Memorial Trophy—Miss Thriftway, driven by Muncy, owned by Willard Rhodes, Seattle
 Governor's Cup—Miss Thriftway, driven by Bill Munn, owned by Willard Rhodes, Detroit

CANOEING

United States Paddling Championships

(At Berrien Springs, Mich.)

Men's distance—1,000 meters; women—500 meters

1-man single—Istvan Hernek, Turkeyfoot K. C., Hudson, Ohio.....	5
Tandem single—Wally Haase-Roger Van de Muelebroecke, Potomac B. C., Washington, D. C.....	4
4-man single—Potomac B. C., Washington, D. C.....	4
Kayak single—Paul Beecham, Potomac B. C., Washington, D. C.....	4
Tandem kayak—Ken Wilson-John Wolters, Inwood C. C., New York.....	3
Kayak fours—Turkeyfoot K. C., Hudson, Ohio.....	3
Women's kayak single—Gloria Perrier, Washington (D. C.) C. C.....	2
Women's tandem kayak—Diane Jerome-Mary Ann Du Chai, Turkeyfoot K. C., Hudson, Ohio.....	2
Team—Washington (D. C.) C. C.....	4

Other U. S. Champions

Decked sailing—Louis Whitman, Sebago C. C., Brooklyn
 Cruising sailing—Stephen Lysak, Yonkers (N. Y.) C. C.
 Class C sailing—Noble Enge, Seminole C. C., Jacksonville, Fla.

ANGLING AND CASTING

Source: Paul N. Jones, Executive Secretary, National Association of Angling and Casting Clubs.

United States Championships

(At Detroit)

All-around—Jon Tarantino, San Francisco

DISTANCE—COMBINED

All-distance—Jon Tarantino, San Francisco.....	3.4
Files—Jon Tarantino, San Francisco.....	1.1
Baits—Edward R. Lanser, St. Louis.....	2.3

DISTANCE—SINGLE EVENT

	avg.	ca
Trout fly—Jon Tarantino, San Francisco.....	182	2
Salmon fly—Bob Budd, Jeffersonville, Ind.....	210	2
½-oz. bait—Edward R. Lanser, St. Louis.....	364%	3
½-oz. bait—Edward R. Lanser, St. Louis.....	410%	4

ACCURACY—COMBINED

All-accuracy—Jon Tarantino, San Francisco.....	35
Files—Jon Tarantino, San Francisco.....	19
Baits—William True, Minneapolis.....	19

ACCURACY—SINGLE EVENT

Dry fly—Jon Tarantino, San Francisco.....	10
Wet fly—Marion Garber, Toledo, Ohio.....	10
½-oz. bait—William True, Minneapolis.....	10
½-oz. bait—Jon Tarantino, San Francisco.....	9

HORSE RACING

The Triple Crown

(Jockeys in parentheses)

KY DERBY, Churchill Downs, May 7, \$125,000 added, olds, 126 pounds, 1 1/4 miles—1, Venetian Way (k); 2, Bally Ache (Ussery); 3, Victoria Park (M.); 4, Tompion (Shoemaker); 5, Bourbon Prince ; 6, Cuvier Relic (Sellers); 7, Tony Graff (Cham-); 8, Spring Broker (Rotz); 9, Divine Comedy (I. uela); 10, Fighting Hodge (Pierce); 11, Yomolka ; 12, Lurullah (Brooks); 13, Henrijian (A. Valen-

02 2/5. Winner, Venetian Way, owned by Sunny arm. Winner's purse, \$114,850. Margin of victory, gths.

ESS STAKES, Pimlico, May 21, \$150,000 added, olds, 126 pounds, 1 3/16 miles—1, Bally Ache ; 2, Victoria Park (DeSpirito); 3, Celtic Ash etis); 4, Divine Comedy (Gilligan); 5, Venetian Way (k); 6, T. V. Lark (Harmatz).

57 3/5. Winner, Bally Ache, owned by Leonard an. Winner's purse, \$121,000. Margin of victory, ns.

STAKES, Belmont Park, June 11, \$125,000 added, ds, 126 pounds, 1 1/2 miles—1, Celtic Ash (Hartack); atian Way (Arcaro); 3, Disperse (Boulmetis); 4, n (Shoemaker); 5, John William (Woodhouse); 6, (York); 7, Tooth and Nail (Guerin).

9 3/5. Winner, Celtic Ash, owned by Green Dunes Winner's purse, \$96,785. Margin of victory, 5 1/2

Foreign Races

by (England)—St. Paddy (Piggott), winner's purse,

ional Steeplechase (England)—Merryman II (G. winner's purse, \$36,775.

ate (Canada)—Victoria Park (A. Gomez), winner's \$2,750.

Other Major U. S. Stakes Winners

Derby—T. V. Lark (Sellers).....	\$ 70,500
Classic—T. V. Lark (Sellers).....	85,500
Futurity—Pappa's All (Taniguchi).....	129,086
Assie—Colfax Maid (S. Brooks).....	59,350
cp.—Berlo (Guerin).....	57,615
cp.—On-and-On (I. Valenzuela).....	70,010
Stakes—Roving Minstrel (H. Moreno).....	108,035
Stakes—Fleet Nasrullah (Longden).....	65,200
lub American Oaks—Berlo (Guerin).....	55,262
kes—Carry Back (Hartack).....	57,095
cp.—Quill (Ussery).....	94,750
takes—Bally Ache (Ussery).....	90,880
by—Bally Ache (Ussery).....	79,500
akes—Little Tumbler (Broussard).....	85,191
te Stakes—Carry Back (Sellers).....	160,782
takes—Bowl of Flowers (Shoemaker).....	90,623
Park Hcp.—Bald Eagle (M. Ycaza).....	71,400
Gold Cup —Kelso (Arcaro).....	88,900
f Hcp.—Amerigo (Hartack).....	58,117
Derby—Tempestuous (P. Moreno).....	68,700
Gold Cup—Dotted Swiss (E. Burns).....	100,000
Juvenile Championship—Pappa's All (i).....	97,050
kes—Hail to Reason (Ussery).....	76,602
y—Bally Ache (Ussery).....	77,995
Gold Cup—Kelso (Arcaro).....	70,205
mpbell Hcp.—Yes You Will (L. Adams).....	74,010
Hcp.—Harmonizing (Ruane).....	70,530
kes—Rose Bower (Rotz).....	59,384
n Hcp.—Bald Eagle (M. Ycaza).....	73,130
Hcp.—First Landing (Arcaro).....	71,650

Princess Pat Stakes—Rose Bower (Rotz).....	60,350
San Juan Capistrano Hcp.—Amerigo (Hartack).....	73,800
Santa Anita Derby—Tompion (Shoemaker).....	83,300
Santa Anita Hcp.—Linmold (Don Pierce).....	97,900
Santa Anita Maturity—First Landing (Arcaro).....	80,490
Sapling Stakes—Hail to Reason (Ussery).....	80,952
Sorority Stakes—Apatontheback (Broussard).....	67,890
Spinaway Stakes—Good Move (Guerin).....	53,672
Spinster Stakes—Rash Statement (Rotz).....	51,475
Suburban Hcp.—Sword Dancer (Arcaro).....	69,165
Sunset Hcp.—Dotted Swiss (E. Burns).....	63,100
Travers Stakes—Tompion (Hartack).....	53,165
United Nations Hcp.—T. V. Lark (Sellers).....	65,000
Washington Park Futurity—Crozier (Baeza).....	127,886
Washington Park Hcp.—T. V. Lark (Sellers).....	68,600
Widener Hcp.—Bald Eagle (Mycza).....	79,700
Withers Stakes—John William (Woodhouse).....	74,950
Wood Memorial Stakes—Francis S. (Shoemaker).....	60,465
Woodward Stakes—Sword Dancer (Arcaro).....	71,730
World's Playground Stakes—Hail to Reason (Ussery).....	81,792

HARNESS RACING

THE HAMBLETONIAN, Du Quoin, Ill., Aug. 31, 3-year-old trotters, one mile—1, Blaze Hanover (1-7-3-1); 2, Quick Song, (3-1-4-2); 3, Hoot Frost (5-13-1-3). Times of heats—1:59 4/5; 1:59 3/5; 1:59 3/5; 2:10 3/5. Winner, Blaze Hanover, driven by Joe O'Brien, owned by S. A. Camp Farms, Shafter, Calif. Total purse, \$144,590.14. Winner's purse, \$85,019.04.

LITTLE BROWN JUG, Delaware, Ohio, Sept. 22, 3-year-old pacers, one mile—1, Bullet Hanover (9-1-1); 2, Muncy Hanover (1-3-3); 3, Betting Time (2-4-2). Times of heats —1:58 3/5; 1:58 3/5; 1:59 3/5. Winner, Bullet Hanover, driven by Johnny Simpson, owned by Hanover (Pa.) Shoe Farms. Total purse, \$66,510.89. Winner's purse, \$29,264.79.

AUTO RACING

Winners of Major Races

Indianapolis 500—Jim Rathmann, Miami, Fla. (Ken-Paul Special), 138.767 mph.

12 hours, Sebring, Fla. (sports and grand touring)—Olivier Gendebien, Belgium—Hans Hermann, Germany (Porsche), 84.927 mph.

International 500-mile stock car race, Daytona Beach, Fla.—Robert Johnson, Ronda, N. C. (Chevrolet), 124.740 mph
1,000 kilometers, Nurburgring, Germany (sports and grand touring)—Stirling Moss, Great Britain—Dan Gurney, Calif. (Maserati), 83 mph

Le Mans (France) 24-hour endurance race (sports and grand touring)—Olivier Gendebien—Paul Frère, Belgium (Ferrari), 109.128 mph

Vanderbilt Cup, Westbury, N. Y.—Harry Carter, Litchfield, Conn. (Stanguellini Formula Jr.), 74.95 mph

Grand Prix de France—Jack Brabham, Australia (Cooper), 131.7 mph

British Grand Prix—Jack Brabham, Australia (Cooper), 108.69 mph

Grand Prix of Europe and Italy—Phil Hill, Santa Monica, Calif. (Ferrari), 212.534 kph

Drives Car 406.6 Miles per Hour

Mickey Thompson of El Monte, Calif., drove his Challenger I car across the Bonneville Salt Flats of Utah at a speed of 406.6 miles per hour in 1960, the fastest time ever achieved on wheels. He failed to achieve an official auto speed record, however, when mechanical trouble stopped him on the required return run. When John Cobb set the listed record of 394.196 mph in 1947, his first run was at 408.185 mph.

RIFLE AND PISTOL SHOOTING

Source: Paul B. Cardinal, National Rifle Association.

National Championships

(At Camp Perry, Ohio)

Pistol—Sgt. 1/c William B. Blankenship, Jr., U. S. Army	2,636-128
Smallbore rifle, prone (.22 cal.)—Arthur E. Cook, Adelphia, Md.	6,390-508
Smallbore rifle, four-position (.22 cal.)—Sgt. Alan M. Dapp, U. S. Marine Corps	1,544-78
Highpower rifle (NRA)—Kenneth C. Erickson, St. Paul, Minn.	638-50
M-1 service rifle—Spl. 4/c James T. Lamm, U. S. Army	644-54

WOMEN

Pistol—Lucile Chambliss, Winter Haven, Fla.	2,496-52
Smallbore rifle, prone—Lenore Jensen, Allen Park, Mich.	6,368-435
Smallbore rifle, four-position—Jilann O. Brunett, Grand Rapids, Mich.	1,504-48
M-1 service rifle—Mrs. Sally A. Sloan, St. Paul, Minn.	615-33
Highpower rifle (NRA)—Mrs. Miralotte S. Ickes, Berkeley, Calif.	631-59

National Trophy Matches

Pistol—Sgt. 1/c Andrew N. Jackson, U. S. Army	294-12
Team pistol—U. S. Army Pacific Blue	1,132-23
Rifle—Pfc. Ronald L. Davies, Jr., U. S. Army	249-20
Team rifle—U. S. Army Blue	1,485-139

Indoor

Smallbore rifle (.22 cal.)—Lt. Tommy G. Pool, U. S. Army	795
Team smallbore rifle—U. S. Army	1,583
Pistol—1st Lt. David Cartes, U. S. Army	883
Team pistol—U. S. Army	1,165

SKETE SHOOTING**World Championships**

(At Lynnhaven, Va.)

All-around—William Hay Rogers, Atherton, Calif.	546
All gauge—Peter Candy, Los Angeles	250
20 gauge—William Hay Rogers, Atherton, Calif.	100
Small gauge—William Hay Rogers, Atherton, Calif.	100
Sub-small gauge—William A. Brown, Jr., Birmingham, Mich.	100

WOMEN

All-around—Mrs. Katharine Dinning, Ruxton, Md.	527
All gauge—Kathleen McGinn, Houston, Tex.	245
20 gauge—Mrs. Betty Myers, Westover A.F.B., Mass.	99
Small gauge—Kathleen McGinn, Houston, Tex.	95
Sub-small gauge—Mrs. Katharine Dinning, Ruxton, Md.	95

LAWN BOWLING

Source: W. G. (Bill) Hay, Honorary President, American Lawn Bowling Association.

National Open Championships

(At St. Petersburg, Fla.)

Singles—Arthur H. Hartley, Clearwater, Fla.	
Doubles—J. Davis—C. H. Brereton, St. Petersburg, Fla.	
Triples—St. Petersburg, Fla. (G. Green, J. Davis, C. H. Brereton)	

Champion of Champions Tournament

(At Buck Hill Falls, Pa.)

Singles—Arnold Lees, Oakland, Calif.	
Doubles—Fred Howarth—Tom Stirrat, Long Beach, Calif.	

TRAPSHOOTING**Grand American Tournament**

(At Vandalia, Ohio)

Grand American Handicap—Roy N. Foxworthy, Indianapolis	
Preliminary Handicap—Karl Mikkelsaar, Jr., Canada	
Double targets—Dale Millar, Ashland, Ohio	
Vandalia Handicap—Frank L. Sidebotham, III, Telford, Pa.	
Clay target—Joe Helstand, Hillsboro, Ill.	

* Won title in shoot-off.

National Amateur Championships

(At Pelham Manor, N. Y.)

Singles—Harold Lamm, Greenwich, Conn.	
Women—Mrs. Alice Worthington, Hartsville, Pa.	
Handicap—Charles L. McArthur, Colmar, Pa.	
Doubles—Edward E. Bahr, Cranford, N. J.	
Senior—Ben Higginson, Newburgh, N. Y.	
Junior—Richard Noering, New York	
Preliminary Handicap—Mrs. Eleanor Bryce, Bronxville, N. Y.	
Family—Roger Fawcett, New York, and Gordon Fawcett, Greenwich, Conn.	
Overall—Ben Higginson, Newburgh, N. Y.	

* Won title in shoot-off.

GYMNASTICS**National A. A. U. Championships**

(At West Point, N. Y.)

All-around—Fred Orlofsky, Southern Illinois	111
Floor exercises—Armando Vega, Penn State	19
Long horse—Larry Banner, Los Angeles Turners	19
Side horse—Gar O'Quinn, U. S. Army	18
Parallel bars—Fred Orlofsky, Southern Illinois, and Armando Vega, Penn State (tie)	19
Horizontal bar—John Beckner, Los Angeles Turners	18
Still rings—Fred Orlofsky, Southern Illinois	19
Tumbling—Harold Holmes, Urbana, Ill.	9
Rebound tumbling—Larry Snyder, Iowa	9
Flying rings—Tom Darling, East Lansing, Mich.	9
Rope climb—Nelson Hulme, Navy	3.5
Team—Penn State	27

WOMEN

All-around—Gail Sontgerath, West Palm Beach, Fla.	14
Floor exercises—Muriel Grossfeld, Urbana, Ill.	18.2
Side horse vault—Betty Maycock, Kent State	18.2
Balance beam—Gail Sontgerath, West Palm Beach, Fla.	18.2
Uneven parallel bars—Muriel Grossfeld, Urbana, Ill.	18.2
Tumbling—Avis Tieber, Crenshaw A. C., Austin, Tex.	9

National Collegiate

(At University Park, Pa.)

All-around—Jay Werner, Penn State	47
Free exercises—Ray Hadley, Illinois	9
Rope climb—Nelson Hulme, Navy	3.4
Side horse—Jim Fairchild, California	96
Horizontal bar—Stan Parshis, Michigan State	96
Rebound tumbling—Larry Snyder, Iowa	96
Parallel bars—Bob Lynn, Southern California	84
Flying rings—Jay Werner, Penn State, and John Aaronson, Army	93
Still rings—Sam Garcia, Southern California	9
Tumbling—Al Barasch, Illinois	9
Team—Penn State	112.4

BOXING

World Championship Fights in 1960

Title at stake	Defender	Challenger	Winner	Round(s)	Where held
*Middleweight	Ray Robinson	Paul Pender	Pender	15	Boston
Bantamweight	Jose Becerra	Alphonse Halimi	Becerra	KO 9	Los Angeles
Jr. Lightweight	Harold Gomes	Flash Elorde	Elorde	KO 7	Manila
Flyweight	Pascual Perez	Pone Kingpetch	Pone	15	Bangkok
†Middleweight	Gene Fullmer	Joey Giardello	draw	15	Bozeman, Mont.
Bantamweight	Jose Becerra	Kenji Yonekura	Becerra ‡	15	Tokyo
Welterweight	Don Jordan	Benny (Kid) Paret	Paret	15	Las Vegas
*Middleweight	Paul Pender	Ray Robinson	Pender	15	Boston
Jr. Welterweight	Carlos Ortiz	Duilo Loi	Ortiz	15	San Francisco
Heavyweight	Ingemar Johansson	Floyd Patterson	Patterson	KO 5	New York
†Middleweight	Gene Fullmer	Carmen Basilio	Fullmer	KO 12	Salt Lake City
Jr. Lightweight	Flash Elorde	Harold Gomes	Elorde	KO 1	San Francisco
Featherweight	Davey Moore	Kazuo Takayama	Moore	15	Tokyo
Jr. Welterweight	Carlos Ortiz	Duilo Loi	Loi	15	Milan
Flyweight	Pone Kingpetch	Pascual Perez	Pone	KO 8	Los Angeles
Lightweight	Joe Brown	Cisco Andrade	Brown	15	Los Angeles

Organized by New York and Massachusetts. † Recognized by the NBA. ‡ Becerra later retired.

AMATEUR BOXING

National A. A. U. Championships

(At Toledo, Ohio)

Wayman Gray, Monroe, Mich.
 Oscar German, Muskegon, Mich.
 George Foster, Cincinnati
 Brian O'Shea, Chicago
 Vincent Shomo, New York
 Phil Baldwin, Muskegon, Mich.
 Wilbert McClure, Toledo, Ohio
 Leotis Martin, Toledo, Ohio
 Cassius Clay, Louisville, Ky.
 Light—Harold Espy, Pocatello, Idaho

National Collegiate A. A.

(At Madison, Wis.)

Heiji Schimabukuro, College of Idaho
 Ron Nichols, San Jose State
 Dave Nelson, San Jose State
 Brown McGhee, Wisconsin
 Steve Kubas, San Jose State
 Mills Lane, Nevada
 Jerry Turner, Wisconsin
 Stu Bartell, San Jose State
 John Horne, Michigan State
 Light—Archie Milton, San Jose State
 San Jose State

WEIGHTLIFTING

National A. A. U. Championships

(At Cleveland)

	Press	Squat	JerK	Total
Charles Vinci, Cleveland.....	215	205	280	700
Isaac Berger, Hollywood, Calif..	250	240	320	810
Tony Garcy, El Paso, Tex.....	250	240	290	780
Tommy Kono, Honolulu.....	290	260	315	865
Jim George, Akron, Ohio.....	290	285	340	915
John Pulskamp, Columbus, Ohio	315	295	380	990
Light—Jim Bradford, Washing-				
C.....	375	320	390	1085

Collegiate Lifting Title to Pitt

University of Pittsburgh won the 1st intercollegiate weightlifting championship in 1960. Ken Smythe of the 1st team retained his heavyweight lifting 845 pounds. The competition held at College Park, Md.

WRESTLING

National A. A. U. Championships

(At San Francisco)

FREE STYLE

114.5-lb.—Gil Sanchez, LaMar, Colo.
 125.5-lb.—Carmen Molino, New York A. C.
 136.5-lb.—Linn Long, Denver
 147.5-lb.—Frank Bettucci, New York A. C.
 160.5-lb.—Doug Blubaugh, New York A. C.
 174.5-lb.—James Ferguson, San Francisco Olympic Club
 191-lb.—Frank Rosenmayr, San Francisco Olympic Club
 Heavyweight—Bill Kerslake, Cleveland
 Team—New York A. C.

GRECO-ROMAN

114.5-lb.—Gil Sanchez, LaMar, Colo.
 125.5-lb.—Lynn Griffith, Denver
 136.5-lb.—Lee Allen, Multnomah A. C., Portland, Ore.
 147.5-lb.—Larry Wright, Oregon State
 160.5-lb.—Joe Vastag, San Francisco Olympic Club
 174.5-lb.—Russ Camilleri, U. S. Air Force
 191-lb.—Frank Rosenmayr, San Francisco Olympic Club
 Heavyweight—Harlow Wilson, U. S. Navy
 Team—San Francisco Olympic Club

National Collegiate A. A.

(At College Park, Md.)

115-lb.—Elliot Simons, Lock Haven State
 123-lb.—Dave Aubel, Cornell
 130-lb.—Stanley Abel, Oklahoma
 137-lb.—Les Anderson, Iowa State
 147-lb.—Larry Hayes, Iowa State
 157-lb.—Art Kraft, Northwestern
 167-lb.—Dick Ballinger, Wyoming
 177-lb.—Roy Conrad, Northern Illinois
 191-lb.—George Goodner, Oklahoma
 Heavyweight—Dale Lewis, Oklahoma
 Team—Oklahoma (59 pts.)

JUDO

National A. A. U. Championships

(At Tampa, Fla.)

140-lb.—Sumikichi Nozaki, Gardena, Calif.
 160-lb.—Toshiyuki Seino, Air Force
 180-lb.—Haruo Imamura, Fresno, Calif.
 Unlimited—George Harris, Air Force
 Overall champion—Haruo Imamura, Fresno, Calif.

SKIING

Source: Harold A. Grinden, Historian, National Ski Assn.

North American Championships

ALPINE

(At Stowe, Vt.)

Slalom—Guy Perillat, France.....	2:03.4
Downhill—Guy Perillat, France.....	1:50.8
Giant slalom—Francois Bonlieu, France.....	2:06.5
Combined—Hias Leitner, Austria.....	4.63 pts.

WOMEN

Slalom—Betsy Snite, Norwich, Vt.....	1:21.4
Downhill—Traudl Hecher, Austria.....	1:31.3
Giant slalom—Marianne Jahn, Austria.....	1:48.6
Combined—Marianne Jahn, Austria.....	7.29 pts.

NORDIC

(At Banff, Canada)

15-kilo. cross-country—Mack Miller, Crested Butte, Colo.....	240.0 pts.
60-m. jump—Enzo Perin, Italy.....	215.0 pts.
Combined—Enzo Perin, Italy.....	455.0 pts.
30-kilo. cross-country—Mack Miller, Crested Butte, Colo.....	2:03.38
80-m. jump—M. Zandonel, Italy.....	213.6 pts.

BOWLING

American Bowling Congress Tournament

(At Toledo, Ohio)

	Pins
Singles—Paul Kulbaga, Cleveland.....	726
Doubles—Andy Marzich—Dick Jensen, Los Angeles.....	1,369
All-events—Vince Lucci, Trenton, N. J.....	1,985
Team—A & A Asphalt, Detroit.....	3,096

Bowling Proprietors' Association of America Champions

Singles (all-star)—Harry Smith, St. Louis.....	312.24 pts.
Doubles—Ray Bluth—Dick Weber, St. Louis.....	158.18 pts.
Team—Budweiser Beer, St. Louis.....	60.173 pts.
Women's singles (all-star)—Sylvia Wene, Philadelphia.....	144.14 pts.
Women's doubles—Venice Pelton—Stevie Balogh, Cleveland.....	6,166 pts.
Duckpin (all-star)—Cliff Kidd, Baltimore.....	165.09 pts.
Women's duckpin (all-star)—Frances Wilson, Washington, D. C.....	77.00 pts.
Team handicap—Supreme Extrusion Die and Tool Co., Hamtramck, Mich.....	9,057

Women's International Bowling Congress

(At Denver)

Singles—Marge McDaniels, Mt. View, Calif.....	649
Doubles—Jette Mooney—Freda Laiber, South Bend, Ind.....	1,221
All-events—Judy Roberts, Angola, N. Y.....	1,836
Team—Spare-Times, Cincinnati.....	2,876

DUCK PINS

National Duck Pin Bowling Congress

(At Richmond, Va.)

Singles—Tony Dela Rocco, Hamden, Conn.....	485
Doubles—Al Rush—Dave Little, Baltimore.....	874
Team—Pla-Mor Bowling Lanes, Arlington, Va.....	2,009
All-events—James Chearno, Baltimore.....	1,292
Women's singles—Inez Rhine, Washington, D. C.....	458
Women's doubles—Jean Robinson—Ethel Dize, Baltimore.....	825
Women's team—Aristocrat Dairy, Baltimore.....	1,834
Women's all-events—Ethel Dize, Baltimore.....	1,259
Mixed doubles—James and Faye Hudson, Kannapolis, N. C.....	848

United States Championships

ALPINE

(At Alta, Utah)

Slalom—Jim Heuga, Tahoe City, Calif.....	1:50.8
Downhill—Oddvar Ronnestad, Norway.....	2:06.5
Giant slalom—Chiharu Igaya, Japan.....	4.63 pts.
Combined—Oddvar Ronnestad, Norway.....	7.29 pts.

WOMEN

Slalom—Anne Heggveit, Canada.....	1:21.4
Downhill—Nancy Greene, Canada.....	1:31.3
Giant slalom—Anne Heggveit, Canada.....	1:48.6
Combined—Elizabeth Greene, Canada.....	7.29 pts.

NORDIC

Jumping—James Brennan, Leavenworth, Wash.....	224.5
15-kilo. cross-country—Clarence Servold, Canada.....	1:06.3
30-kilo. cross-country—Richard Taylor, Gilford, N. H.....	2:10.0
Combined—Alf Vincelle, Highland Falls, N. Y.....	449.9

National Collegiate A. A.

(At Bozeman, Mont.)

Slalom—Rudy Ruana, Montana.....	1:50.8
Downhill—Dave Butts, Colorado.....	2:06.5
Alpine combined—Mauritz Sonberg, Denver.....	455.0
Jumping—Dag Halgestad, Washington State.....	200.0
Cross-country—John Dendahl, Colorado.....	58.5
Nordic combined—John Dendahl, Colorado.....	96.4
Skiteister—John Dendahl, Colorado.....	378.5
Team—Colorado.....	571.4

ROLLER SKATING

A. R. S. A. Championships

Source: U. S. Amateur Roller Skating Association

(At Levittown, N. Y.)

Singles—Paul Zukowski, Elizabeth, N. J.....	1:50.8
Women's singles—Dawn Brown, Trenton, N. J.....	2:06.5
Women's pairs—Linda Kobane—Marlene Steinberg, Livonia, Mich.....	4.63 pts.
Mixed pairs—Paul Zukowski—Dianne Ludwig, Elizabeth, N. J.....	7.29 pts.
Dance—Earl Roberts—Madelyn Higgins, Levittown, N. Y.....	1,369
Fours—Elizabeth, N. J. (Ernest Schmid, Barbara Jablonski, Paul Zukowski, Dianne Ludwig).....	1,985
Speed—David Babb, Bayonne, N. J.....	3,096
Women's speed—Judy Armer, Reading, Pa.....	3,096
Relay—Frank Eberhardt—Michael Nash, Washington, D. C.....	3,096

Rink Operators Championships

Source: Roller Skating Rink Operators Association

(At Little Rock, Ark.)

Singles—Rob Wollard, Long Beach, Calif.....	1:50.8
Women's singles—Carolyn Sliger, Oklahoma City.....	2:06.5
Figures—Tom Gregory, Pontiac, Mich.....	4.63 pts.
Women's figures—Chris Benda, Grandview, Mo.....	7.29 pts.
Pairs—Robert Wollard—Carol Stout, Long Beach, Calif.....	1,369
Dance—Jack Greer—Linda Jo Baker, Atlanta, Ga.....	1,985
Fours—Pontiac, Mich. (Louis Parker, Sylvia Ritchie, Rick Martins, Sue Welch).....	3,096
Speed—George Grudza, Pennel, Pa.....	3,096
Women's speed—Mary Merrell, Fullerton, Calif.....	3,096
Relay—Wichita, Kan. (Pat Carter, Charles Stover, Ronald Watkins, Richard Edwards).....	3,096
Women's relay—Wichita, Kan. (Jody Fehring, Barbara Solter, Cindy Rodick, Lynda Stawitz).....	3,096
Mixed relay—Wichita, Kan. (Patrick Carter, Charles Stover, Jody Fehring, Barbara Solter).....	3,096

BASEBALL

1960 WORLD SERIES

Pittsburgh Pirates (N.L.) defeated New York Yankees (A.L.), 4 games to 3

1st Game—at Pittsburgh, Wed., Oct. 5

NEW YORK (A)					PITTSBURGH (N)				
ab	r	hr	bi		ab	r	hr	bi	
ss...	6	0	3	0	Virdon, cf...	3	1	1	1
rf...	6	0	1	0	Groat, ss...	4	1	2	1
cf...	4	2	3	1	Skinner, lf...	3	1	1	1
lf...	3	0	0	0	Cimoli, lf...	0	0	0	0
1b...	4	0	2	1	Stuart, 1b...	4	0	1	0
b...	0	0	0	0	Clemente, rf...	4	0	1	1
3b...	0	0	0	0	Burgess, cf...	4	0	0	0
2b...	3	0	1	0	Hoak, 3b...	2	1	0	0
p...	0	0	0	0	Mazeroski, 2b	4	2	2	2
ard...	1	0	0	0	Law, p...	1	0	0	0
	1	0	0	0	Face, p...	1	0	0	0
	1	0	1	0					
	0	0	0	0	Totals.....	30	6	8	6
	1	1	1	2					
	37	4	13	4					

out for Boyer in 2d. bGrounded out for in 5th. cSingled for Maas in 7th. dHomered in 9th.

k.....	1	0	0	1	0	0	0	0	2-4
gh.....	3	0	0	2	0	1	0	0	x-6

bk, Richardson. 2B—Groat, Virdon. HR—Mazeroski, Howard. SB—Virdon, Skinner. S—DP—Mazeroski-Stuart. Skinner—Mazeroski, ki-Groat-Stuart. LOB—New York 7, Pitts- BB, off—Law 1 (Mantle), Dittmar 1 (Virdon), (Hoak), Duren 1 (Hoak). SO, by—Law 3 (Mantle, Skowron), Face 2 (Mantle, Skowron), (Mazeroski, Virdon), Maas 1 (Burgess), Duren 2. H, off—Law 10 in 7 Innings (faced 2 batters Face 3 in 2, Dittmar 3 in 1/3, Coates 3 in 3 2/3, in 2, Duren 0 in 2. R & ER, off—Law 2-2, Dittmar 3-3, Coates 2-2, Maas 1-1. HP, by (Law), Duren 1 (Skinner). Wild pitch—Law. v. LP—Dittmar. ss—Bogges (N), plate; Stevens (A), 1b; Jaco- N), 2b; Chylak (A), 3b; Landes (N), lf; Hono- N), rf. Time—2:29. Paid attendance—36,676. \$233,260.24.

2nd Game—at New York, Sat., Oct. 8

PITTSBURGH (N)					NEW YORK (A)				
ab	r	hr	bi		ab	r	hr	bi	
cf...	4	0	1	0	Cerv, lf.....	5	1	2	0
rf...	4	0	0	0	Maris, rf.....	3	0	0	0
b, rf...	4	0	1	0	Berra, rf.....	1	0	1	0
lf...	4	0	1	0	Mantle, cf.....	5	2	4	2
3b...	3	0	0	0	Skowron, 1b...	5	2	2	1
2b...	3	0	0	0	McDougald, 3b	4	2	2	1
1b...	3	0	1	0	Howard, c.....	4	1	2	1
p...	0	0	0	0	Richardson, 2b	5	1	2	6
ard...	0	0	0	0	Kubek, ss.....	3	0	1	0
	1	0	0	0	Ford, p.....	4	1	1	0
	0	0	0	0					
	1	0	0	0	Totals.....	39	10	16	10
	1	0	0	0					
	0	0	0	0					
	1	0	0	0					
	0	0	0	0					
	31	0	4	0					

ded out for Witt in 6th. bLined out for in 8th.

h.....	0	0	0	0	0	0	0	0	0-0
	6	0	0	4	0	0	0	0	x-10

ek. 2B—Virdon, Mantle. HR—Richardson. DP—Ford-Richardson-Skowron. LOB—h 5, New York 9. BB, off—Ford 1 (Cimoli), (McDougald), Witt 2 (Kubek, Maris), Gibbon 3. SO, by—Ford 3 (Clemente, Stuart, Cimoli), (Skowron, McDougald, Richardson, Witt 1 heney 3 (Howard, Ford, Mantle). H, off—9 Innings, Mizell 3 in 1/3, Labine 4 in 1/3, n 3, Witt 3 in 1 1/3, Cheney 1 in 2, Gibbon & ER, off—Mizell 4-4, Labine 2-2, Green 4-4. h—Green, Witt. WP—Ford. LP—Mizell. s—Jackowski (N), plate; Chylak (A), 1b; N), 2b; Stevens (A), 3b; Honochick (A), lf; N), rf. Time—2:41. Paid attendance—70,001. \$438,687.88.

2d Game—at Pittsburgh, Thu., Oct. 6

NEW YORK (A)					PITTSBURGH (N)				
ab	r	hr	bi		ab	r	hr	bi	
Kubek, ss, lf...	6	3	3	1	Virdon, cf...	5	0	0	0
McDougald, 3b...	3	1	2	2	Groat, ss...	4	0	1	0
DeMaestri, ss...	2	1	1	0	Gibbon, p...	0	0	0	0
Maris, rf...	5	2	1	0	Cheney, p...	0	0	0	0
Mantle, cf...	4	3	2	5	cChristopher...	0	1	0	0
Berra, lf...	4	1	1	2	Clemente, rf...	5	0	2	0
Boyer, 3b...	2	0	1	0	Nelson, 1b...	5	1	2	0
Skowron, 1b...	6	1	2	1	Cimoli, lf...	4	1	2	1
Howard, c...	5	1	2	1	Burgess, c...	4	0	2	0
Richardson, 2b	4	3	3	2	Hoak, 3b...	4	0	2	1
Turley, p...	4	0	1	1	Mazeroski, 2b	5	0	1	0
Shantz, p...	0	0	0	0	Friend, p...	1	0	0	0
					aBaker.....	1	0	0	0
Totals.....	45	16	19	15	Green, p...	0	0	0	0
					Labine, p...	0	0	0	0
					Witt, p...	0	0	0	0
					bSchoffield, ss	1	0	1	0
					Totals.....	39	11	13	2

aPopped out for Friend in 4th. bSingled for Witt in 6th. cHit by pitch for Cheney in 9th.

New York.....	0	0	2	1	2	7	3	0	1-18
Pittsburgh.....	0	0	0	1	0	0	0	0	2-3

E—Groat, Richardson. 2B—Mazeroski, McDougald, Hoak 2, Richardson, Boyer. 3B—Howard. HR—Mantle 2, S—Turley. DP—Shantz-Richardson-Skowron. LOB—New York 8, Pittsburgh 13. BB, off—Friend 2 (Richardson, Mantle), Green 1 (McDougald), Labine 1 (Maris), Cheney 1 (Mantle), Turley 3 (Cimoli, Burgess, Schoffield). SO, by—Friend 6 (McDougald, Mantle, Skowron 2, Howard 2), Labine 1 (Mantle), Gibbon 2 (Maris, Turley), Cheney 2 (DeMaestri, Maris), H, off—Friend 4 in 6 Innings, Green 1 in 3 (faced 2 batters in 6th), Labine 3 in 2/3, Witt 2 in 1/3, Gibbon 2 in 4, Cheney 1 in 1, Turley 13 in 8 1/3, Shantz 0 in 2/3. R & ER, off—Friend 3-2, Green 4-4, Labine 5-0, Gibbon 3-3, Cheney 1-1, Turley 3-2, Shantz 0-0. HP, by—Turley 1 (Christopher). Wild pitch—Cheney. PB—Burgess 2. WP—Turley. LP—Friend.

Umpires—Stevens (A), plate; Jackowski (N), 1b; Chylak (A), 2b; Bogges (N), 3b; Landes (N), lf; Honochick (A), rf. Time—3:14. Paid attendance—37,308. Receipts—\$235,765.13.

4th Game—at New York, Sun., Oct. 9

PITTSBURGH (N)					NEW YORK (A)				
ab	r	hr	bi		ab	r	hr	bi	
Virdon, cf...	4	0	1	2	Cerv, lf.....	4	0	1	0
Groat, ss...	4	0	0	0	Kubek, ss...	4	0	1	0
Clemente, rf...	4	0	1	0	Maris, rf.....	4	0	0	0
Stuart, 1b...	4	0	0	0	Mantle, cf...	3	0	0	0
Cimoli, lf...	4	1	1	0	Berra, c.....	4	0	0	0
Burgess, c...	3	1	0	0	Skowron, 1b...	4	2	2	1
Oldis, c...	0	0	0	0	McDougald, 3b	4	0	1	0
Hoak, 3b...	4	0	1	0	Richardson, 2b	3	0	2	1
Mazeroski, 2b	3	0	1	0	cLong.....	1	0	0	0
Law, p...	3	1	2	1	Terry, p...	2	0	0	0
Face, p...	1	0	0	0	Shantz, p...	0	0	0	0
					aBlanchard...	1	0	1	0
Totals.....	34	3	7	3	bDeMaestri...	0	0	0	0
					Coates, p...	0	0	0	0
					Totals.....	34	2	8	2

aSingled for Shantz in 7th. bRan for Blanchard in 7th. cFlied out for Richardson in 9th.

Pittsburgh.....	0	0	0	3	0	0	0	0	0-3
New York.....	0	0	1	0	0	1	0	0	0-2

E—none. 2B—Kubek, Richardson, Law, Skowron. HR—Skowron. S—Mazeroski. DP—Hoak-Stuart. LOB—Pittsburgh 6 New York 6. BB, off—Terry 1 (Burgess), Law 1 (Mantle). SO, by—Terry 5 (Virdon, Clemente 2, Mazeroski, Law), Shantz 1 (Virdon), Coates 1 (Face), Law 5 (Mantle, McDougald, Terry, Cerv, Kubek), Face 1 (Mantle). H, off—Terry 6 in 6 1/3 Innings, Shantz 0 in 2/3, Coates 1 in 2, Law 8 in 6 1/3, Face 0 in 2 2/3. R & ER, off—Terry 3-3, Law 2-2. WP—Law. LP—Terry.

Umpires—Chylak (A), plate; Bogges (N), 1b; Stevens (A), 2b; Jackowski (N), 3b; Landes (N), lf; Honochick (A), rf. Time—2:29. Paid attendance—67,812. Receipts—\$431,925.60.

5th Game—At New York, Mon., Oct. 10

6th Game—at Pittsburgh, Wed., Oct. 12

PITTSBURGH (N)

NEW YORK (A)

NEW YORK (A)

PITTSBURGH (N)

	ab	r	hr	bi		ab	r	hr	bi
Viridon, cf...	5	0	1	0	McDougald, 3b	4	0	0	0
Groat, ss...	4	1	1	0	Maris, rf...	4	1	1	1
Clemente, rf	4	0	1	0	Cerv, lf...	4	0	1	0
Stuart, 1b...	4	1	1	0	Mantle, cf...	4	0	0	0
Nelson, 1b...	0	0	0	0	Skowron, 1b	4	0	0	0
Cimoli, lf...	4	0	0	0	Howard, c...	3	1	1	0
Burgess, c...	4	1	2	6	bBerra, c...	1	0	0	0
cChristopher	0	1	0	0	Richardson, 2b	4	0	0	0
Olds, c...	0	0	0	0	Kubek, ss...	4	0	1	1
Hoak, 3b...	4	1	2	2	Ditmar, p...	0	0	0	0
Mazeroski, 2b	4	0	1	2	Arroyo, p...	1	0	0	0
Haddix, p...	3	0	1	0	Stafford, p...	1	0	0	0
Face, p...	1	0	0	0	aLopez...	1	0	1	0
Totals.....	37	5	10	5	Duren, p...	0	0	0	0
					dBlanchard...	1	0	0	0

Totals..... 33 2 5 2

aSingled for Stafford in 7th. bGrounded out for Howard in 8th. cRan for Burgess in 9th. dFiled out for Duren in 9th.

Pittsburgh..... 0 3 1 0 0 0 0 0 1—5
New York..... 0 1 1 0 0 0 0 0 0—2

E—Hoak, McDougald, Groat, Cerv. 2B—Burgess, Mazeroski, Howard, Groat, Viridon. HR—Maris. DP—Stafford-Kubek-Skowron, Mazeroski-Stuart. LOB—Pittsburgh 5, New York 7. BB, off—Haddix 2 (Mantle 2), Face 1 (Mantle). SO, by—Arroyo 1 (Haddix), Stafford 2 (Cimoli, Hoak), Duren 4 (Clemente, Cimoli, Mazeroski, Face), Haddix 6 (Skowron, Kubek, Stafford, Cerv, Mantle, Howard), Face 1 (Maris). H, off—Ditmar 3 in 1 1/3 Innings, Arroyo 2 in 2/3 (faced 2 batters in 3d), Stafford 3 in 5, Duren 2 in 2, Haddix 5 in 6 1/3, Face 0 in 2 2/3. R & ER, off—Ditmar 3-1, Arroyo 1-1, Duren 1-1, Haddix 2-2. Wild pitch—Duren. PB—Burgess. WP—Haddix. LP—Ditmar.

Umpires—Bogges (N), plate; Stevens (A), 1b; Jackowski (N), 2b; Chylak (A), 3b; Landes (N), lf; Honochick (A), rf. Time—2:32. Paid attendance—62,753. Receipts—\$419,135.44.

7th Game—at Pittsburgh, Thu., Oct. 13

NEW YORK (A)

PITTSBURGH (N)

	ab	r	hr	bi		ab	r	hr	bi
Richardson, 2b	5	2	2	0	Viridon, cf...	4	1	2	2
Kubek, ss...	3	1	0	0	Groat, ss...	4	1	1	1
DeMaestri, ss	0	0	0	0	Skinner, lf...	2	1	0	0
dLong...	1	0	1	0	Nelson, 1b...	3	1	1	2
eMcD'gald, 3b	0	1	0	0	Clemente, rf	4	1	1	1
Maris, rf...	5	0	0	0	Burgess, c...	3	0	2	0
Mantle, cf...	5	1	3	2	bChristopher	0	0	0	0
Berra, lf...	4	2	1	4	Smith, c...	1	1	1	3
Skowron, 1b	5	2	2	1	Hoak, 3b...	3	1	0	0
Blanchard, c	4	0	1	1	Mazeroski, 2b	4	2	2	1
Boyer, 3b, ss	4	0	1	1	Law, p...	2	0	0	0
Turley, p...	0	0	0	0	Face, p...	0	0	0	0
Stafford, p...	0	0	0	0	cCimoli...	1	1	1	0
aLopez...	1	0	1	0	Friend, p...	0	0	0	0
Shantz, p...	3	0	1	0	Haddix, p...	0	0	0	0
Coates, p...	0	0	0	0	Totals.....	31	10	11	10
Terry, p...	0	0	0	0					

Totals..... 40 9 13 9

aSingled for Stafford in 3d. bRan for Burgess in 7th. cSingled for Face in 8th. dSingled for DeMaestri in 9th. eRan for Long in 9th.

New York..... 0 0 0 0 1 4 0 2 2—9
Pittsburgh..... 2 2 0 0 0 0 0 5 1—10

* None out when winning run was scored.

E—Maris. 2B—Boyer. HR—Nelson, Skowron, Berra, Smith, Mazeroski. S—Skinner. DP—Stafford-Blanchard-Skowron, Richardson-Kubek-Skowron, Kubek-Richardson-Skowron. LOB—New York 6, Pittsburgh 1. BB, off—Law 1 (Kubek), Face 1 (Berra), Turley 1 (Skinner), Stafford 1 (Hoak), Shantz 1 (Nelson). SO—none. H, off—Law 4 in 5 Innings (faced 2 batters in 6th), Face 6 in 3, Friend 0 in 2 (faced 2 batters in 9th), Haddix 1 in 1, Turley 2 in 1 (faced 1 batter in 2d), Stafford 2 in 1, Shantz 4 in 5 (faced 3 batters in 8th), Coates 2 in 2/3, Terry 1 in 1/3 (faced 1 batter in 9th). R & ER, off—Law 3-3, Face 4-4, Friend 2-2, Turley 3-3, Stafford 1-1, Shantz 3-3, Coates 2-2, Terry 1-1. WP—Haddix. LP—Terry.

Umpires—Jackowski (N), plate; Chylak (A), 1b; Bogges (N), 2b; Stevens (A), 3b; Landes (N), lf; Honochick (A), rf. Time—2:36. Paid attendance—36,683. Receipts—\$233,424.19.

CYCLING

U. S. amateur champion—James Ross, Chicago
Tour de France—Gastone Nencini, Italy

aRan for Howard in 2d. bStruck out for Cheney in 3d. cStruck out for Mizell in 5th. dGrounded out for Labine in 8th.

New York..... 0 1 5 0 0 2 2 2 0—6
Pittsburgh..... 0 0 0 0 0 0 0 0 0—6

E—Kubek, Viridon. 2B—Maris, Skowron, Blanchard. 3B—Richardson 2, Boyer. S—Ford. SF—Skowron. DP—Richardson-Kubek-Skowron, Boyer-Richardson-Skowron 2, Groat-Mazeroski-Stuart, Hoak-Mazeroski-Stuart. LOB—New York 8, Pittsburgh 6. BB, off—Friend 1 (Berra), Mizell 1 (Mantle), Ford 1 (Howard), Friend 1 (Boyer), Cheney 1 (Ford), Mizell 1 (Maris), Labine 1 (Mantle), Ford 5 (Stuart, Berra, Groat, Cimoli, Nelson). H, off—Friend 5 in 2 Innings (faced 4 batters in 3d), Cheney 2 in 1, Mizell 1 in 1, Green 3 in 0 (faced 3 batters in 6th), Labine 6 in 1, Witt 0 in 1, Ford 7 in 9. R & ER, off—Friend 6-Cheney 1-1, Green 2-2, Labine 4-4. HP, by—Friend 1 (Howard, Kubek). Wild pitch—Labine. WP—Ford. LP—Friend.

Umpires—Stevens (A), plate; Jackowski (N), 1b; Chylak (A), 2b; Bogges (N), 3b; Landes (N), lf; Honochick (A), rf. Time—2:38. Paid attendance—38,753. Receipts—\$240,529.40.

POLO

Source: Lillian M. Lauria, U. S. Polo Association.

National Champions

Open—Oak Brook-CCC (A. D. Beveridge, Wayne Brown, Cecil Smith, Harold Barry)
20-goal—Royal Palm (Bert Beveridge, Robert Beveridge, R. Harrington, Benny Gutierrez)
Inter-circuit—Tulsa (John Oxley, Jack Oxley, Jules Romf, C. R. Collee)
12-goal—Tulsa (John Oxley, Jack Oxley, Jules Romf, C. R. Collee)
Butler Handicap—Milwaukee (Memo Gracida, Julio Muller, George Oliver, Robert Uihlein, Jr.)

INDOOR

12-goal—Eastern division, Huntington (Frank Rice, Dan Rizzo, Allen Jerkins; Western division, Shamrocks (Patrick Connors, Truman Wood, Richard Bunn)
Sherman Memorial—Eastern division, Long Island (Arnold Mucine, Frank Rice, Ray Koch); Western division, Farm Optimists (Gene Schram, Eugene Brown, Mel Mark)
Intercollegiate—Yale (Richard Jones, Jarrett Vincent, Willard Welch)

SOCCER

Source: Flannery News Bureau, New York.

Major U. S. Winners

National Challenge Cup—Ukrainian Nations, Philadelphia
National Amateur Cup—Kutis, St. Louis
International League—Bangu, Brazil
National Junior Cup—St. Paul the Apostle, St. Louis

Foreign

Europe Cup—Real Madrid, Spain
Pan-American—Argentina
British—Scotland
English Football Association—Wolverhampton-Wanderers
English League—Burnley

MAJOR LEAGUE BASEBALL RECORDS FOR 1960

American League

Final Standing of the Clubs

	New York	Baltimore	Chicago	Cleveland	Washington	Detroit	Boston	Kansas City	Won	Lost	Percentage	Games Behind
Yankees	13	12	16	12	14	15	15	97	57	.630	—	—
Baltimore Orioles	9	13	14	11	13	16	13	89	65	.578	8	—
Chicago White Sox	10	9	11	14	11	17	15	87	67	.565	10	—
Cleveland Indians	6	8	11	—	16	7	13	76	78	.494	21	—
Washington Senators	10	11	8	6	—	12	11	73	81	.474	24	—
Detroit Tigers	8	9	11	15	10	—	8	71	83	.461	26	—
Boston Red Sox	7	6	5	9	11	14	—	65	89	.422	32	—
Kansas City Royals	7	9	7	7	7	12	9	58	96	.377	39	—

National League

Final Standing of the Clubs

	Pittsburgh	Milwaukee	St. Louis	Los Angeles	San Francisco	Cincinnati	Chicago	Philadelphia	Won	Lost	Percentage	Games Behind
Pittsburgh Pirates	13	11	11	14	16	15	15	95	59	.617	—	—
Milwaukee Braves	9	—	11	10	14	13	15	16	88	66	.571	7
St. Louis Cardinals	11	11	—	12	9	14	14	15	86	68	.558	9
Los Angeles Dodgers	11	12	10	—	10	10	13	16	82	72	.532	13
San Francisco Giants	8	8	13	12	—	11	13	14	79	75	.513	16
Cincinnati Reds	6	9	8	12	11	—	12	9	67	87	.435	28
Chicago Cubs	7	7	8	9	9	10	—	10	60	94	.390	35
Philadelphia Phillies	7	6	7	6	8	13	12	—	59	95	.383	36

THE LEADERS

Pete Runnels, Boston	.320
Mickey Mantle, New York	.40
Ed in—Roger Maris, New York	.112
Mickey Mantle, New York	.119
Nie Minoso, Chicago	.184
Tito Francona, Cleveland	.35
Nellie Fox, Chicago	.10
es—Luis Aparicio, Chicago	.51

Batting—Dick Groat, Pittsburgh	.325
Home runs—Ernie Banks, Chicago	.41
Runs batted in—Henry Aaron, Milwaukee	.126
Runs—Bill Bruton, Milwaukee	.112
Hits—Willie Mays, San Francisco	.190
Doubles—Vada Pinson, Cincinnati	.37
Triples—Bill Bruton, Milwaukee	.13
Stolen bases—Maury Wills, Los Angeles	.50

PITCHING

uck Estrada, Baltimore, and Jim Perry	.18
—Jim Coates, New York (13-3)	.813
average—Frank Bauman, Chicago	.268
—Jim Bunning, Detroit	.202

PITCHING

Wins—Ernie Broglio, St. Louis, and Warren Spahn, Milwaukee	.21
Percentage—Lindy McDaniel, St. Louis (12-4)	.750
Earned run average—Mike McCormick, San Francisco	.270
Strikeouts—Don Drysdale, Los Angeles	.246

1960 MAJOR LEAGUE ALL-STAR GAMES

In the previous year, two major All-Star games were played in 1960. The National League won both. The senior defeated the American League, 5 to 3, in New York on July 11 and repeated, in New York on July 13. Willie Mays had three hits in each game—a triple, and double in the first; a homer and three singles in the other.

Three No-Hitters in '60

No-hit games were pitched in the 1960, all by National Leaguers. The Chicago Cubs achieved a no-hit, beating the St. Louis Cardinals, in the second game of a doubleheader on May 15. Cardwell walked the batter and then set the next 26 in order. The others were pitched by Jim Bunning and Warren Spahn, both of the Milwaukee Braves, both against the Philadelphia Phillies, both in night games. Jim Bunning stopped the Phillies, Aug. 18, permitting only one base hit batsman. Spahn, who allowed no hits, blanked them, 4-0, on Sept. 16.

First Game, at Kansas City

	R	H	E
National	3	1	1
American	0	0	0

Batteries—Friend, McCormick (4), Face (6), Buhl (8), Law (9) and Crandall, Burgess; Monbouquette, Estrada (3), Coates (4), Bell (6), Lary (8), Daley (9) and Berra, Howard. WP—Friend. LP—Monbouquette. HR—Banks, Crandall, Kaline. Time of game—2:39. Attendance—30,619. Managers, NL—Alston, AL—Lopez.

Second Game, at New York

	R	H	E
National	0	2	1
American	0	0	0

Batteries—Law, Podres (3), S. Williams (5), Jackson (7), Henry (8), McDaniel (9) and Crandall, Burgess, Bailey; Ford, Wynn (4), Staley (6), Lary (8), Bell (9) and Berra, Lollar. WP—Law. LP—Ford. HR—Mathews, Mays, Musial, Boyer. Time of game—2:42. Attendance—38,362. Managers, NL—Alston, AL—Lopez.

SOFTBALL

World Champions

(Amateur Softball Association)

Men—Clearwater (Fla.) Bombers
 Women—Raybestos Brackettes, Stratford, Conn.
 Men's slow pitch, open—Hamilton Tailoring, Cincinnati
 Men's slow pitch, Industrial—Pharr Yarn, McAdenville, N. C.
 Women's slow pitch—Carolina Rockets, High Point, N. C.

Batting Averages

(Unofficial—200 at bats or more)

American League

	g	ab	r	h	hr	rbi	avg.
Runnels, Boston	143	528	80	169	2	35	.320
Williams, Boston	113	310	56	98	29	72	.316
Smith, Chicago	142	536	80	169	12	72	.315
Minoso, Chicago	154	591	89	184	20	105	.311
Skowron, New York	146	538	63	166	26	81	.309
Kuenn, Cleveland	126	474	65	146	9	54	.308
Geiger, Boston	77	246	32	74	9	33	.301
Slivers, Chicago	127	444	87	131	28	93	.295
Robinson, Baltimore	152	595	74	175	14	88	.294
Green, Washington	127	330	62	97	6	33	.294
Francona, Cleveland	147	544	84	159	17	79	.292
Gentile, Baltimore	138	384	66	112	21	98	.292
Fox, Chicago	150	605	85	175	2	69	.289
Power, Cleveland	147	580	69	167	10	84	.288
Aspromonte, Wash. Cleve.	121	462	65	133	10	48	.288
Williams, Kansas City	127	420	47	121	12	63	.288
Cash, Detroit	124	353	64	101	18	63	.286
Nixon, Cleve.-Bost.	105	354	30	101	6	38	.285
Lopez, New York	131	408	66	116	9	42	.284
Marls, New York	136	499	98	141	39	112	.283
Woodling, Baltimore	140	434	68	123	11	62	.283
Piersall, Cleveland	138	486	70	137	18	66	.282
Wertz, Boston	131	444	45	125	19	103	.282
Siebert, Kansas City	144	520	69	145	19	69	.279
Kalline, Detroit	147	551	77	153	15	68	.278
Aparicio, Chicago	153	600	86	166	2	61	.277
Mantie, New York	153	526	119	145	40	94	.276
Killebrew, Washington	124	442	83	122	31	80	.276
Berra, New York	120	359	46	99	16	62	.276
Bauer, Kansas City	95	255	30	70	3	31	.275
Kubek, New York	147	568	76	155	14	62	.273
Freese, Chicago	127	455	60	124	17	79	.273
Lumpe, Kansas City	146	574	70	156	8	54	.272
Romano, Cleveland	109	316	40	86	16	52	.272
Malzone, Boston	152	595	60	161	14	79	.271
Batley, Washington	137	466	49	126	15	60	.270
Lemon, Washington	148	528	81	142	38	100	.269
Trlandos, Baltimore	109	364	36	98	12	54	.269
Tasby, Balt.-Bost.	144	470	77	126	7	40	.268
Temple, Cleveland	98	381	60	102	2	19	.268
Breeding, Baltimore	152	551	69	147	3	43	.267
Herzog, Kansas City	83	252	43	67	8	38	.266
Bertola, Washington	121	460	44	122	4	45	.265
P. Daley, Kansas City	74	229	19	60	5	25	.262
Yost, Detroit	143	497	78	129	14	47	.260
Snyder, Kansas City	124	304	44	79	4	26	.260
McDougald, New York	119	336	54	87	8	34	.259
Held, Cleveland	109	376	45	97	21	67	.258
Gardner, Washington	145	592	71	152	9	56	.257
Tuttle, Kansas City	161	560	75	143	8	40	.255
Hansen, Baltimore	153	530	72	132	22	86	.255
Chrisley, Detroit	96	220	27	56	5	24	.255
Bolling, Detroit	139	536	64	136	9	58	.254
Brandt, Baltimore	145	512	73	130	15	65	.254
Lands, Chicago	148	494	69	125	10	51	.253
Cerv, K. C.-N. Y.	110	293	46	74	14	40	.253
Richardson, New York	159	421	46	116	1	26	.252
Lollar, Cleveland	129	421	43	106	7	46	.252
Beaquer, Washington	110	298	41	75	4	35	.252
Allison, Washington	145	501	79	126	15	69	.251
Colavito, Detroit	145	555	67	138	35	87	.249
Throneberry, Kansas City	104	237	29	59	11	41	.249
Keough, Bost.-Cleve.	103	254	34	63	4	20	.248
Buddin, Boston	124	428	62	105	6	36	.245
Howard, New York	107	323	29	79	6	39	.245
Boyer, New York	124	393	54	95	14	46	.242
Green, Boston	133	260	36	63	3	21	.242
Fernandez, Detroit	133	435	44	105	4	35	.241
Maxwell, Detroit	134	482	70	114	24	81	.237
Stephens, Bost.-Balt.	119	302	47	71	7	23	.235
Carey, N. Y.-K. C.	106	346	31	81	12	54	.234
Clinton, Boston	96	297	37	68	6	38	.229
Hamlin, Kansas City	139	428	51	96	2	24	.224
Dobbek, Washington	110	248	32	54	10	31	.218
Wilson, Det.-Cleve.	77	222	22	48	2	25	.216
Valdivielso, Washington	117	269	23	57	2	19	.212
Phillips, Cleveland	113	304	34	63	4	33	.207
Blisko, Detroit	78	222	20	46	9	25	.207
Chiti, K. C.-Det.	95	294	25	59	7	33	.201
Berbet, Detroit	85	232	18	45	5	23	.194

National League

	g	ab	r	h	hr	rbi	avg.
Groat, Pittsburgh	138	573	85	186	2	60	.300
Larker, Los Angeles	133	440	55	142	5	79	.299
Mays, San Francisco	163	595	107	190	29	103	.303
Clemente, Pittsburgh	144	570	89	179	16	94	.294
Boyer, St. Louis	151	552	95	168	32	97	.297
Nelson, Pittsburgh	93	200	34	60	7	38	.293
Moon, Los Angeles	138	469	74	140	13	65	.289
Adcock, Milwaukee	138	514	55	153	25	92	.289
Cepeda, San Francisco	151	569	81	169	24	96	.288
Robinson, Cincinnati	139	464	86	158	31	83	.286
Wills, Los Angeles	148	516	75	152	0	27	.287
Smith, Pittsburgh	77	258	37	76	11	45	.285
Crandall, Milwaukee	142	537	81	158	19	76	.285
Burgess, Pittsburgh	110	337	33	99	7	39	.283
Aaron, Milwaukee	153	590	102	172	40	126	.280
Kasko, Cincinnati	126	479	56	140	6	50	.280
Ashburn, Chicago	151	547	99	159	0	40	.280
Pinson, Cincinnati	154	653	107	187	20	61	.281
Bruton, Milwaukee	151	629	112	180	12	54	.280
Smith, Philadelphia	97	217	24	62	4	27	.277
T. Taylor, Chi.-Phil.	146	581	80	165	5	44	.276
White, St. Louis	144	554	81	157	16	79	.276
Hoak, Pittsburgh	155	553	98	156	16	79	.276
Post, Phil.-Cin.	111	333	47	94	19	59	.275
Herrera, Philadelphia	145	612	61	114	17	31	.273
Cunningham, St. Louis	139	492	68	138	6	39	.273
Mathews, Milwaukee	163	548	108	159	39	124	.272
Amalfitano, San Francisco	106	329	47	91	1	25	.269
Davis, Los Angeles	110	352	43	97	11	44	.268
Musial, St. Louis	116	331	49	91	17	63	.268
Gonzalez, Cin.-Phil.	117	340	37	93	9	47	.267
Skinner, Pittsburgh	145	571	83	156	15	85	.266
Mazeroski, Pittsburgh	151	538	58	147	11	54	.264
Banks, Chicago	156	697	94	162	41	117	.263
Coleman, Cincinnati	66	251	26	68	3	32	.262
Howard, Los Angeles	117	448	55	120	23	77	.261
Schmidt, San Francisco	110	344	31	92	8	37	.260
Cimoli, Pittsburgh	101	307	36	82	0	28	.259
Altman, Chicago	119	334	50	89	13	61	.258
Dark, Phil.-Mil.	105	339	45	90	4	32	.257
Virdon, Pittsburgh	120	409	59	108	8	40	.256
Alou, San Francisco	106	322	48	85	8	44	.255
Bell, Cincinnati	143	515	65	135	12	62	.254
Moryn, Chi.-St. L.	113	309	36	81	13	45	.253
Bailey, Cincinnati	133	441	52	115	13	67	.252
Curry, Philadelphia	95	245	28	64	6	34	.251
Stuart, Pittsburgh	122	438	48	114	23	83	.250
Callison, Philadelphia	99	288	36	75	9	30	.249
Spencer, St. Louis	148	507	70	131	16	58	.248
Zimmer, Chicago	132	368	37	95	6	35	.247
Schoendienst, Milwaukee	86	226	21	58	1	19	.246
Neal, Los Angeles	139	477	60	122	8	40	.245
Will, Chicago	138	475	58	121	6	52	.244
Kirkland, San Francisco	146	515	59	130	21	65	.243
Davenport, San Francisco	112	363	43	91	6	38	.242
Santo, Chicago	95	347	44	87	9	44	.241
Covington, Milwaukee	95	281	25	70	10	35	.240
Gilliam, Los Angeles	151	557	96	138	5	40	.239
Martin, Cincinnati	103	317	34	78	3	16	.238
Logan, Milwaukee	136	482	52	118	7	41	.237
Rodgers, San Francisco	81	217	22	53	2	22	.236
Snider, Los Angeles	101	235	38	57	14	35	.235
Bouchee, Phil.-Chi.	120	384	34	88	5	52	.234
Kindall, Chicago	89	246	17	59	2	23	.233
Walters, Philadelphia	124	426	42	102	8	37	.232
Thomas, Chicago	135	479	54	114	21	64	.231
McCovey, San Francisco	101	260	37	62	13	51	.230
Javier, St. Louis	119	451	55	107	4	21	.229
Flood, St. Louis	140	396	37	94	8	38	.228
Di Greco, Philadelphia	100	300	48	71	10	31	.227
Blasingame, San Francisco	136	522	72	123	2	42	.226
McMillan, Cincinnati	124	399	43	94	10	45	.225
Amaro, Philadelphia	92	284	25	61	2	28	.224
Smith, St. Louis	127	337	20	77	3	19	.223
Cottler, Milwaukee	95	229	29	52	3	19	.222
Bressoud, San Francisco	116	386	37	87	4	28	.221
Walls, Cin.-Phil.	84	265	31	69	4	26	.220
Coker, Philadelphia	81	252	18	54	6	24	.219
Roseboro, Los Angeles	103	287	22	61	8	43	.218

CLUB BATTING

American League

	ab	r	h	hr	rbi	sb	avg.
Chicago	5191	741	1402	112	686	122	.270
Cleveland	5306	667	1415	127	631	69	.267
Boston	5215	658	1359	124	622	32	.261
New York	5290	746	1377	193	699	37	.260
Baltimore	5170	682	1307	123	641	36	.253
Kansas City	5227	615	1303	110	564	15	.249
Washington	5248	672	1283	147	626	61	.244
Detroit	5202	633	1243	150	601	64	.239

National League

	ab	r	h	hr	rbi	sb	avg.
Pittsburgh	5406	734	1493	120	889	34	.276
Milwaukee	5264	724	1393	170	681	89	.268
San Francisco	5324	671	1357	130	621	85	.265
Los Angeles	5227	662	1333	126	607	49	.264
St. Louis	5187	639	1317	138	692	48	.263
Cincinnati	5289	640	1324	140	603	71	.260
Chicago	5311	634	1293	119	599	61	.259
Philadelphia	5169	546	1235	99	501	45	.258

(Unofficial—10 or more decisions)

National League

	g	ip	n	bb	s	w	l	era
McDaniel, St. Louis	65	116	85	24	103	12	4	2.08
Mahaffey, Philadelphia	14	93	78	34	56	7	3	2.33
McCormick, San Fran.	40	253	227	65	152	15	12	2.70
Farrell, Philadelphia	59	103	88	29	69	10	6	2.77
Broglio, St. Louis	52	226	172	100	187	21	9	2.78
Roebuck, Los Angeles	58	117	109	38	77	8	3	2.77
Drysdale, Los Angeles	41	269	214	72	246	15	14	2.84
Face, Pittsburgh	68	115	93	29	72	10	8	2.90
Friend, Pittsburgh	38	276	266	45	182	18	12	3.30
Williams, Los Angeles	38	207	162	72	177	14	10	3.00
Simmons, St. L.-Phil.	27	156	162	37	67	7	4	3.06
Law, Pittsburgh	35	272	266	40	120	20	9	3.08
Podres, Los Angeles	34	228	217	71	159	14	12	3.08
Buhl, Milwaukee	56	239	202	103	120	16	9	3.09
Sam Jones, San Fran.	39	234	198	91	190	18	14	3.19
O'Dell, San Francisco	43	203	198	72	148	8	13	3.19
Green, Pittsburgh	45	70	61	33	48	8	4	3.21
Craig, Los Angeles	21	116	99	43	69	8	3	3.26
Jay, Milwaukee	32	134	129	60	88	9	8	3.29
Burdette, Milwaukee	45	276	277	35	82	19	13	3.36
Elston, Chicago	60	128	107	55	84	8	9	3.38
Spahn, Milwaukee	40	268	255	74	153	21	10	3.46
Jackson, St. Louis	43	282	277	70	171	18	13	3.48
Mizell, St. L.-Pitts.	32	211	205	74	112	14	8	3.50
Purkey, Cincinnati	41	253	259	69	97	17	11	3.59
Conley, Philadelphia	29	183	192	42	116	8	14	3.69
Ellsworth, Chicago	31	177	170	72	94	7	13	3.71
Sadecki, St. Louis	26	167	148	86	93	9	9	3.78
Antonelli, San Francisco	41	112	107	47	56	6	7	3.78
Sherry, Los Angeles	57	142	125	81	112	14	10	3.80
O'Toole, Cincinnati	34	196	198	66	123	12	12	3.81
Sanford, San Francisco	37	219	200	99	125	12	14	3.82
Buzhardt, Philadelphia	30	200	197	68	71	5	16	3.87
Miller, San Francisco	47	102	99	31	65	7	6	3.87
Koufax, Los Angeles	37	175	133	100	197	8	13	3.91
Hobbie, Chicago	46	259	253	101	135	16	20	3.93
Morehead, Chicago	45	123	123	46	64	2	9	3.95
Short, Philadelphia	42	107	101	52	54	6	9	3.95
Haddix, Pittsburgh	29	172	189	38	101	11	10	3.98
Roberts, Philadelphia	35	237	256	34	122	12	16	4.03
Anderson, Chicago	38	204	201	68	113	9	11	4.10
McLish, Cincinnati	37	151	171	48	54	4	14	4.11
Willey, Milwaukee	28	144	136	64	104	6	7	4.38
Cardwell, Phil.-Chi.	36	204	195	78	149	9	16	4.41
Hook, Cincinnati	36	222	222	73	101	11	18	4.50
Pizarro, Milwaukee	21	115	105	72	89	6	7	4.54
Newcombe, Cincinnati	16	83	99	14	36	4	6	4.66
Owens, Philadelphia	31	150	182	64	82	4	14	5.04
Kline, St. Louis	34	118	132	43	55	4	9	6.03

PITTSBURGH

	g	ab	r	h	2b	3b	hr	rbi	bb	so	avg
Virdon, cf.	7	28	2	7	3	0	0	5	1	3	.241
Groat, ss.	7	29	3	6	2	0	0	2	0	1	.214
Clemato, rf.	7	29	1	9	0	0	0	3	0	4	.310
*Nelson, 1b.	4	9	2	3	0	0	0	2	1	1	.333
Stuart, 1b.	4	9	0	3	0	0	0	0	0	3	.150
Skinner, lf.	2	5	2	1	0	0	0	1	2	0	.200
*Cimoli, lf.	7	20	4	5	0	0	0	1	2	4	.250
Burgess, c.	5	18	2	6	1	0	0	0	2	1	.333
Oldis, c.	2	0	0	0	0	0	0	0	0	0	.000
Smith, c.	3	8	1	3	0	0	1	3	0	0	.375
Hoak, 3b.	7	23	3	5	2	0	0	3	4	1	.217
Mazeroski, 2b.	7	25	4	8	2	0	2	5	0	3	.320
Law, p.	3	6	1	2	1	0	0	1	0	1	.333
Face, p.	4	3	0	0	0	0	0	0	0	2	.000
Friend, p.	3	1	0	0	0	0	0	0	0	0	.000
*Baker.	3	3	0	0	0	0	0	0	0	1	.000
Green, p.	3	1	0	0	0	0	0	0	0	0	.000
Labine, p.	3	0	0	0	0	0	0	0	0	0	.000
Witt, p.	3	0	0	0	0	0	0	0	0	0	.000
*Schofield, ss.	3	3	0	1	0	0	0	0	1	0	.333
Gibbon, p.	2	0	0	0	0	0	0	0	0	0	.000
Cheney, p.	3	0	0	0	0	0	0	0	0	0	.000
†Christopher.	3	0	2	0	0	0	0	0	0	0	.000
Mizell, p.	2	0	0	0	0	0	0	0	0	0	.000
Haddix, p.	2	3	0	1	0	0	0	0	0	1	.333

utter. † Pinch runner.

MINOR LEAGUE BASEBALL

JUNIOR WORLD SERIES

Louisville (American Association) defeated Toronto (International League), 4 games to 2

PAN-AMERICAN ASSN. PLAYOFFS

Tulsa (Texas League) defeated Mexico City Tigers (Mexican League), 4 games to 1

CLASS AAA

American Association

FINAL STANDING OF THE CLUBS

	W	L	Pct.		W	L	Pct.
Denver.....	88	66	.571	Minneapolis..	82	72	.532
*Louisville..	85	68	.556	Charleston..	65	88	.425
Houston.....	83	71	.539	Indianapolis	65	89	.422
St. Paul....	83	71	.539	Dallas—			
				Ft. Worth..	64	90	.416

[* Won playoffs.

THE LEADERS

BA—Larry Osborne, Denver.....	.342
HR—Larry Osborne, Denver.....	.34
RBI—Larry Osborne, Denver, and Steve Boros, Denver	119
Pitching (wins)—Jim Golden, St. Paul.....	20
Pitching (ERA)—Jim Golden, St. Paul.....	2.32

International League

FINAL STANDING OF THE CLUBS

	W	L	Pct.		W	L	Pct.
*Toronto....	100	54	.649	Jersey City..	76	77	.497
Richmond....	82	70	.539	Columbus....	69	84	.451
Rochester....	81	73	.526	Miami.....	65	88	.425
Buffalo.....	78	75	.510	Montreal....	62	92	.403

[* Won playoffs.

THE LEADERS

BA—Jim Frey, Rochester.....	.317
HR—Joe Altobelli, Montreal.....	.31
RBI—Joe Altobelli, Montreal.....	106
Pitching (wins)—Al Cicotte, Toronto.....	16
Pitching (ERA)—Al Cicotte, Toronto.....	1.79

Pacific Coast League

FINAL STANDING OF THE CLUBS

	W	L	Pct.		W	L	Pct.
Spokane....	92	61	.601	Seattle.....	77	75	.507
Tacoma.....	81	73	.526	Sacramento..	73	81	.474
Salt Lake City	80	73	.523	Vancouver..	68	84	.447
San Diego ..	77	75	.507	Portland....	64	90	.416

THE LEADERS

BA—Willie Davis, Spokane.....	.346
HR—R. C. Stevens, Salt Lake City.....	.37
RBI—Harry Bright, Salt Lake City.....	119
Pitching (wins)—Chet Nichols, Vancouver.....	18
Pitching (ERA)—Don Rudolph, Seattle.....	2.42

CLASS AA

League and champion

Mexican—Mexico City Tigers.....	Playoff winner
Southern Assn.—Atlanta.....	No playoffs
Texas—Rio Grande Valley.....	Little Rock
	Tulsa

CLASS A

Eastern—Williamsport.....	Springfield and Williamsport
South Atlantic—Columbia.....	Savannah

CLASS B

Carolina—Greensboro (1st half);	
Burlington (2d half).....	Greensboro
Northwest—Yakima (both halves).....	No playoffs
Three-I—Fox Cities.....	No playoffs

CLASS C

California—Reno (both halves).....	No playoffs
Northern—Winnipeg.....	Winnipeg
Pioneer—Boise (1st half); Idaho Falls	
(2d half).....	Boise

CLASS D

Alabama—Florida—Panama City.....	Pensacola
Appalachian—Wytheville.....	No playoffs
Florida State—Lakeland (1st half);	
Palatka (2d half).....	Palatka
Mexican Center—Salamanca.....	No playoffs
Midwest—Waterloo (both halves).....	No playoffs
New York—Penn—Erie.....	Wellsville
Sophomore—Alpine (1st half); Hobbs	
(2d half).....	Hobbs
Western Carolina—Lexington.....	Salisbury

Other Baseball Champions

National Baseball Congress—Grand Rapids (Mich.)	Sullivan
National Collegiate A. A.—Minnesota	
National Junior College—Phoenix, Ariz.	
American Legion Junior—Crescent City Post, New Orleans	
Little League—Levittown, Pa.	
Hearst Sandlot Classic—United States All-Stars	
Babe Ruth League—Huntington, W. Va.	
Connie Mack World Series—Seattle	
American Amateur Congress—Seattle	
All-America Amateur Assn., Limited Div.—Washington, D. C.	
Pony League—Oak Park, Ill.	
Colt League—San Jose, Calif.	
National Teeners—Gastonia, N. C.	
National Amateur Federation, Senior—Detroit	
National Amateur Federation, Junior—Detroit	

CHESS

Source: *American Chess Bulletin*, New York.

World Champions

Men—Mikhail Tal, U.S.S.R.
Women—Elizabeth Bykova, U.S.S.R.
Junior—Carlos Bielicki, Argentina
Students, team—United States

United States

Men—Bobby Fischer, Brooklyn, N. Y.
Women—Lisa Lane, Philadelphia
Open—Robert Byrne, Indianapolis
Amateur—Raul Benedicto, New York
Amateur speed—Joseph Orzano, Scarsdale, N. Y.
Junior—Robin Ault, Cranford, N. J.

EQUESTRIAN

World Jumping Championship
(At Venice, Italy)

Individual—Raimondo D'Inzeo, Italy
Team—Italy

Resweber Motorcycling Champion

Carroll Resweber of Cedarburg, Wis., won the American Motorcycling Association's national racing championship for the third consecutive year in 1960.

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